



15. Appendix D: Test Requirements and Results

Overview and Strategy

The testing procedures specified here will be used to determine whether or not the WORMS application meets each functional requirement. The WORMS web application will be tested in the latest versions of the following web browsers: Google Chrome, Mozilla Firefox, and Safari. Unit Tests will test individual components of the system. Integration tests will be used to ensure that subsets of the system components work together properly. System tests will be performed as integration tests of the entire set of system components. System tests will verify that the functional requirements are met. Nonfunctional requirements will be verified as much as possible through regular interaction with the system.

Unit Tests and Test Cases

A unit test is used to determine whether or not an individual component of a software system is functioning correctly. Each unit test is made up of a set of test cases. Test Cases have input actions, steps to be performed, the state before test, and expected results for the test case. If the result observed for a test case is the expected result, then the test passes. If all test cases pass, the software component being tested is considered to be functioning properly.

Unit tests for these WORMS modules are given in Appendix D.

- Login
- Create Account
- Submit
- Review
- Conference Configuration
- Programming Contest Team Creation
- Scheduling
- System Admin Options
- Conference Registration

Integration Test

An integration test is used to determine whether or not a subset of the components, or units, making up a software system interact with each other properly. When a unit is implemented or modified it must be unit tested to ensure that it functions properly. Once the unit has been determined to be functioning correctly, the related units must also be tested. The units related to a given unit are specified in the unit test directory.



System Test

A system test is an integration test of all components of the software system. A system test determines whether or not the functionality specified in the Functional Requirements Inventory exists in the software system.

Functional Requirements

The functional requirements here marked with a bold “Yes” have been successfully implemented in the WORMS software, and the ones marked with a bold “No” are not functioning at this time.

| | System Administrator |
|-----------------|--|
| Yes / No | Able to add email addresses to a list of verified conference chairs |
| Yes / No | Able to add email addresses to a list of verified submission chairs |
| Yes / No | Able to specify the types of submissions a submission chair is responsible for |
| Yes / No | Able to view a list of all submitted works |
| Yes / No | Able to add topics to the list of topics a scholarly work may be categorized into |
| | Conference Chair |
| Yes / No | Able to create an account using an email address that has been specified by the System Administrator |
| Yes / No | Able to add and remove events from a schedule |
| Yes / No | Able to edit conference information including hotels, parking information, and sponsors |
| Yes / No | Able to configure the available banquet meal selections |



| | Submission Chair |
|----------|---|
| Yes / No | Able to create an account using an email address that has been specified by the System Administrator |
| Yes / No | Able to specify the deadline for submission of scholarly works |
| Yes / No | Able to view a list of submitted scholarly works |
| Yes / No | Able to download each submitted scholarly work |
| Yes / No | Able to view reviews given to each scholarly work |
| Yes / No | Able to specify whether or not each scholarly work is accepted |
| Yes / No | Able to view credentials of users who have applied to become reviewers |
| Yes / No | Able to specify whether or not a user is allowed to review scholarly works |
| | Reviewer |
| Yes / No | Able to create an account |
| Yes / No | Able to submit credentials for review by a Submission Chair |
| Yes / No | Able to check whether or not he/she has been accepted as a reviewer |
| Yes / No | Able to view scholarly works that have been assigned to him/her for review |
| Yes / No | Able to submit a review form for each assigned scholarly work |
| | Submitter |
| Yes / No | Able to create an account |
| Yes / No | Able to select the type of scholarly work he/she wishes to submit |
| Yes / No | Able to upload a PDF file with a paper or abstract for a submission |
| Yes / No | Able to upload an anonymous version of the PDF submission in addition to the normal version |
| Yes / No | If valid submission options are provided, the Submitter's PDF files will be uploaded and stored on the WORMS server |
| Yes / No | A notification email of acceptance or rejection will be received for each scholarly work |



| | |
|-----------------|--|
| | Programming Contest Team Advisor |
| Yes / No | Able to create an account |
| Yes / No | Able to create a programming contest team |
| Yes / No | Able to create a list of email addresses indicating the programming contest team members |
| | Programming Contest Participant |
| Yes / No | Able to create an account |
| Yes / No | After his/her advisor has added he/she to the team, the participant will see an indication on the programming contest team that he/she is a member of a team |
| Yes / No | Able to view information about the programming contest such as dates, times, and contest environment information |
| | Conference Attendee |
| Yes / No | Able to create an account |
| Yes / No | Able to choose workshops to attend while at the conference |
| Yes / No | Able to select a meal choice for each meal occurring during the conference |
| Yes / No | Able to choose to present an accepted scholarly work |
| Yes / No | Able to register to attend the conference |
| | Other |
| Yes / No | Any user who visits the WORMS web site will be able to view general conference information and the schedule of events |
| Yes / No | Users who are not Conference Chairs, Submission Chairs, or the System Administrator will be able to apply to become a Reviewer or submit a Scholarly work |
| Yes / No | All users are able to log in and log out of the system |
| Yes / No | Upon account creation email addresses will be validated using a validation email |
| Yes / No | The software functions properly in the latest versions of Google Chrome, Mozilla Firefox, and Safari |



Non-functional Requirements

The WORMS software’s single Non-functional Requirement was that it should be user friendly. In its current state, the system has significant room for improvement in this area.

Unit Test: Home Page

| System Test - Test Results for All Unit Tests | | | | | | | |
|--|--------|--------|-------------|--------------------|---|--|-----------------------------|
| Team Name | | | | TRACE Technologies | | | |
| Project Name | | | | WORMS | | | |
| Client Name | | | | Dr. Darren Lim | | | |
| Directory of Unit Tests | | | | | | | |
| Pass/Fail Status | Passed | Failed | Unit Number | Unit Test Name | Date Last Tested | Comments or brief description | Integrated with these units |
| P | 100% | 6 | 0 | 1 | Login | 4/22/13 <i>Check if login data is verified properly</i> | 2 |
| F | 60% | 3 | 2 | 2 | Create Account | 4/22/13 <i>Create a new account</i> | 1 |
| F | 83% | 5 | 3 | 3 | Submit | 4/23/13 <i>Submit a scholarly work</i> | 4, 8 |
| F | 86% | 6 | 1 | 4 | Review | 4/23/13 <i>Review a scholarly work</i> | 3, 8 |
| F | 40% | 2 | 3 | 5 | Conference Configuration | 4/28/13 <i>Edit conference information</i> | 1, 2 |
| F | 0% | 0 | 4 | 6 | Programming Contest Team Creation | 4/28/13 <i>Ensure a team can be created and joined</i> | 1, 2 |
| F | 75% | 3 | 1 | 7 | Scheduling | 4/28/13 <i>Ensure events can be created and viewed</i> | 1, 2, 5 |
| F | 0% | 0 | 5 | 8 | System Admin Options | 4/28/13 <i>Ensure the system admin can edit options</i> | 1, 2, 3, 4, 5 |
| F | 33% | 1 | 2 | 9 | Conference Registration | 4/23/13 <i>Ensure users can properly register to attend</i> | 1, 2, 8 |
| F | 25% | 1 | 3 | 10 | Submission Chair | 4/28/13 <i>Accept or Reject submitted scholarly works and reviewer applications</i> | 1, 2, 3, 8 |
| 71.05% of Test Cases Passed (99.44% passes the Ivory Snow Test) | | | | | | | |

Unit Test: Login

| WORMS Login | | | | | | | | | | |
|--|----------------|---------------------------------|--|--|-------------------|---|-----------------------------------|----------|-----------|------------|
| To allow a user to login to the system | | | | | | | | | | |
| Test Cases | | | | | | | | | | |
| Pass/Fail Status | Test Number | Description | Action to perform test (input) | Steps to be Executed | State Before Test | Expected result | Observed result | Comments | Tested By | Test Date |
| P | 1.001 | Empty email field | Leave email field empty | Fill in password field and click login button | Empty Form | Error Message: "Please enter your email" | Please fill in the E-mail field | | Eduardo | 04/22/2013 |
| P | 1.002 | Empty password field | Leave password field empty | Fill in email field and click login button | Empty Form | Error Message: "Please enter your password" | Please fill in the Password field | | Eduardo | 04/22/2013 |
| P | 1.003 | Both email and password correct | Enter an email that does exist in the database | Enter the correct password for that user and click login button. | Empty Form | Navigate to user home page | Correct Login | | Eduardo | 04/22/2013 |
| P | 1.004 | Wrong email | Enter an email that does not exist in the database | Enter something in the password field and click login button. | Empty Form | Error Message: "Login failed" | Invalid Login | | Eduardo | 04/22/2013 |
| P | 1.005 | Wrong password | Enter an email that exists in the database | Enter a password that does not correspond to the email provided and click the login button | Empty Form | Error Message: "Login Failed" | Invalid Login | | Eduardo | 04/22/2013 |
| P | 1.006 | Both Empty Fields | Do not enter email or password for login | Click login button | Empty Form | Error Message: "Login failed" | Please fill in the E-mail field | | Eduardo | 04/22/2013 |
| F | = Unit Summary | | 100% passing | | 6 passed | | Date of last test = | | 1/0/00 | |
| | 6 tests | | | | 0 failed | | | | | |
| Directory Page | | | | | | | | | | |



Unit Test: Create Account

| WORMS | | | | | | | | | | |
|---|----------------|--------------------------|---|---|--|--|--|----------|---------------------|------------|
| Create Account | | | | | | | | | | |
| To allow a user to create a new account | | | | | | | | | | |
| Test Cases | | | | | | | | | | |
| Pass/Fail Status | Test Number | Description | Action to perform test (input) | Steps to be Executed | State Before Test | Expected result | Observed result | Comments | Tested By | Test Date |
| F | 2.001 | Invalid email address | Enter email address which does not have an @ symbol designating an email provider | Enter an invalid email and fill out all other fields and click submit button | Empty form | Error Message: "Invalid email address" | The system accept a invalid email as login and allows the user create an account | | Eduardo | 04/22/2013 |
| P | 2.002 | Invalid password | Enter an invalid password | Enter an invalid password and fill out all other fields and click the submit button | Empty form | Error Message: "Invalid password" | Passwords must be at least 8 characters | | Eduardo | 04/22/2013 |
| P | 2.003 | Unmatching passwords | Enter two passwords which do not match | Enter the two non matching passwords and all other fields and click the submit button | Empty form | Error Message: "Passwords do not match" | Passwords do not match | | Eduardo | 04/22/2013 |
| F | 2.004 | Verification email | Check to see if account received verification email in their email's inbox | Check account's email inbox and click verification link. Then manually check user database for the account to see if it is now verified | Account created, verification email not received | Account in user database is listed as verified | | | Eduardo | 04/22/2013 |
| P | 2.005 | Empty required fields | Fill out the form leaving a required field empty | Fill out all other fields except one required field and click the submit button | Empty form | Error Message: "Please fill out all required fields" | Missing required field | | Eduardo | 04/22/2013 |
| | 2.006 | Required fields complete | Fill in required forms and click submit | Fill in required fields | Empty form | Successful creation of account | | | | |
| F | = Unit Summary | | | 60% passing | | 3 passed | | | Date of last test = | 1/0/00 |
| | 5 | tests | | | | 2 failed | | | | |
| Directory Page | | | | | | | | | | |



Unit Test: Submit

| WORMS | | | | | | | | | | |
|--|--------------------------------|--|--|--|---|---|---|----------|---------------------|-----------|
| Submit | | | | | | | | | | |
| To allow a user to submit their scholarly work | | | | | | | | | | |
| Test Cases | | | | | | | | | | |
| Pass/Fail Status | Test Number | Description | Action to perform test (Input) | Steps to be Executed | State Before Test | Expected result | Observed result | Comments | Tested By | Test Date |
| F | 3.001 | Invalid Format | Submit a file that is not a valid PDF | Fill out all fields, select a file that is not a valid PDF | Empty form | Error Message: "Invalid format,PDF required" | Worms does not validate the file type | | Eduardo | 4/23/13 |
| F | 3.002 | Empty Submission Title | Fill out all fields and upload files leaving submission title empty. | Fill out all fields and upload files leaving submission title empty and click submit. | Empty field | Error Message: "Please fill out a Submission Title" | Title may not be blank | | Eduardo | 4/23/13 |
| P | 3.003 | Type selection | Select Submission Type from drop down menu and fill out all required fields | Fill out all required fields and select type and click Submit. | Submission Type by default on "Paper" | Successful submission with submission type selected. | | | Eduardo | 4/23/13 |
| P | 3.003 | Just regular submission | Submit a regular submission scholarly work in a valid .pdf format with all required fields completed | With a valid .pdf format and all fields required, click the submit button and manually view the database to ensure a successful submission | Valid database, submittable .pdf, and all required fields completed | Error Message: "Failed to upload submission, please try again" | Please select an anonymous file to submit | | Eduardo | 4/23/13 |
| P | 3.004 | Just anonymous submission | Submit a scholarly work in a valid .pdf format with all required fields completed | With a valid .pdf format and all fields required, click the submit button and manually view the database to ensure a successful submission | Valid database, submittable .pdf, and all required fields completed | Error Message: "Failed to upload submission, please try again" | Please select a file to submit | | Eduardo | 4/23/13 |
| P | 3.005 | Is topic selected | Submit form without adding at least one topic | Fill out form with valid information without adding a topic and click submit. | Default submission form. | Error Message: "Please select at least one topic for your submission" | Select at least one topic. | | Eduardo | 4/23/13 |
| P | 3.006 | View submissions | Click "View My Submissions" tab and check for submitted works | Submit scholarly works and check "View My Submissions" tab for uploaded works | Have works submitted or submit works to check if listed. | Submitted works will be listed. | | | Ryan | 4/28/13 |
| F | 3.007 | Leave form blank and click Submit button | Leave submit form blank and click submit button | Leave form blank and click submit button and wait for error message | Empty form | Error Message: Please select a file to submit | Please select a file to submit | | Ryan | 4/28/13 |
| F | = Unit Summary | | 83% | passing | 5 | passed | | | Date of last test = | 4/23/13 |
| | 6 tests | | | | | 3 failed | | | | |
| | Directory Page | | | | | | | | | |



Unit Test: Review

WORMS

Review

To allow a user to view and review submitted works and submit their evaluation

| Test Cases | | | | | | | | | | |
|------------------|--------------------------------|--|---|--|---|--|-----------------|----------|---------------------|-----------|
| Pass/Fail Status | Test Number | Description | Action to perform test (input) | Steps to be Executed | State Before Test | Expected result | Observed result | Comments | Tested By | Test Date |
| P | 4.001 | Download review template | Click on link to download review template | Click on link to download review template and check users download folder for successful download. | Download file without review template file | Successful download of review template and is stored in Downloads directory for user | | | Eduardo | 4/23/13 |
| P | 4.002 | Successful upload of review into the database | Completely fill out the review form | With the form completely filled out, hit the submit review button and manually check the database to ensure that the review was successfully submitted | Valid scholarly work in the database waiting to be reviewed | Review form uploaded | | | Eduardo | 4/23/13 |
| P | 4.003 | Submission Acceptance | Log in as a submission chair and accept a submission | Log in as a submission chair, select a reviewed submission, view the review, click accept or reject | Submissions that have been reviewed exist in the database | Submission is marked as accepted in the database | | | Eduardo | 4/23/13 |
| P | 4.004 | Successful download of scholarly work submission | Click on download link to assigned scholarly work | Click on download link to download assigned scholarly work and check user Downloads directory to see if download is there | Scholarly work exists in database for reviewer to download | Successful download of assigned scholarly work and is stored in Downloads directory for user | | | Eduardo | 4/23/13 |
| P | 4.005 | Select scholarly work for review and check valid information displayed | Click radio button for specific scholarly work for review | Click radio button for specific scholarly work for review and check if valid information is displayed | Radio button for most recent scholarly work is selected | Proper information about scholarly work selected is displayed | | | Ryan | 4/28/13 |
| P | 4.006 | Review form uploaded is docx file | Upload review form file and check if docx file | Upload docx review form for a scholarly work and validate that docx file has been uploaded | Review form has not been uploaded for selected scholarly work | Review form uploaded is docx format | | | Ryan | 4/28/13 |
| F | 4.007 | Selecting submit button without fields filled out result in error | Leave form blank and click submit button | Do not upload review form for selected scholarly work and click submit | Empty form | Error Message: Please upload valid review form | | | Ryan | 4/28/13 |
| F | = Unit Summary | | | 86% passing | | 6 passed | | | Date of last test = | 4/28/13 |
| | 7 tests | | | | | 1 failed | | | | |
| | Directory Page | | | | | | | | | |

Unit Test: Conference Configuration

WORMS

Conference Configuration

Configuration of conference options by conference chairs

| Test Cases | | | | | | | | | | |
|------------------|--------------------------------|--------------------------|---|--|-------------------|---|---------------------------------|-----------------|---------------------|-----------|
| Pass/Fail Status | Test Number | Description | Action to perform test (input) | Steps to be Executed | State Before Test | Expected result | Observed result | Comments | Tested By | Test Date |
| F | 5.001 | Add Hotel | Add a hotel on the information page | Log in as conference chair. Navigate to information page. Add a hotel | Empty form | Users may view the newly added hotel on the information page | | Not Implemented | Ryan | 4/28/13 |
| F | 5.002 | Add Meal | Configure a new meal choice | Log in as conference chair. Add a new meal choice under the configuration page | Empty form | Users may select the newly added meal choice upon registration | | Not Implemented | Ryan | 4/28/13 |
| F | 5.003 | Edit general information | Edit general information | Log in as a conference chair. Navigate to the general information page. Edit the general information section | Empty form | Users who navigate to the site can view the newly edited information. | | Not Implemented | Ryan | 4/28/13 |
| P | 5.004 | Add Topic | Type in topic name in field provided | Type in topic name in field provided and click "Add" | Empty form | Newly successful added topic | New topic is added and viewable | | Ryan | 4/28/13 |
| P | 5.005 | Remove Topic | Select topics provided and click remove | Select topics provided and click remove | Empty form | Selected topic will be removed from the list | Topic is removed from the list | | Ryan | 4/28/13 |
| F | = Unit Summary | | | 40% passing | | 2 passed | | | Date of last test = | 4/28/13 |
| | 5 tests | | | | | 3 failed | | | | |
| | Directory Page | | | | | | | | | |



Unit Test: Programming Contest Team Creation

WORMS

Programming Contest Team Creation

Creation of programming contest teams by a team advisor

| Pass/Fail Status | Test Cases | | Action to perform test (input) | Steps to be Executed | State Before Test | Expected result | Observed result | Comments | Tested By | Test Date |
|------------------|-----------------------|--|--|---|----------------------------------|--|----------------------------|-----------------|---------------|-----------|
| | Test Number | Description | | | | | | | | |
| F | 6.001 | View Team Members | Create a contest team, view team page | Create a contest team by filling out the form with valid data. Go to the programming contest page. | Empty form | Page displays team member emails and indicates which ones are registered in the system | | Not Implemented | Ryan | 4/28/13 |
| F | 6.002 | Creation of programming contest team. | Program contest advisor fills out required forms for email addresses of contest team participants. | Fill out all forms required for each participant on the programming contest team and hit the submit button. | Empty forms | Successful creation of programming contest team with a list of participants. | | Not Implemented | Ryan | 4/28/13 |
| F | 6.003 | Valid email addresses of participants. | Register accounts with the email addresses provided by an advisor | Register accounts with email addresses provided by an advisor. Log in with those accounts and confirm they are added to the team. | Programming contest team created | Accounts that log in with emails provided by the advisor can view team information | | Not Implemented | Ryan | 4/28/13 |
| F | 6.004 | At least one team member | Fill out the team creation form without adding any members | Fill out the team creation form without adding any members. Attempt to submit the form. | Empty form | Error: team must have at least one person | | Not Implemented | Ryan | 4/28/13 |
| F | = Unit Summary | | 0% passing | | 0 passed | | Date of last test = | | 1/0/00 | |
| | 4 tests | | | | 4 failed | | | | | |

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Unit Test: Scheduling

WORMS

Conference Event Scheduling

To allow an event to be scheduled by the conference chair

| | Test Cases | | Action to perform test (input) | Steps to be Executed | State Before Test | Expected result | Observed result | Comments | Tested By | Test Date |
|---|-----------------------|---------------------------|---|--|---|--|----------------------------|----------|----------------|-----------|
| | Test Number | Description | | | | | | | | |
| P | 7.001 | Scheduling an event | Click Google Calendar button and login using credentials | Click Google Calendar button and login using credentials. Add event | Calendar embed in web page | New Event appears | | | Ryan | 4/28/13 |
| P | 7.002 | Deleting an event | Click Google Calendar button and login using credentials. Then select event to be deleted and click delete. | Select an event already on the calendar and select delete. | Events in calendar untouched before deleting. | Event selected should be removed from calendar. | | | Ryan | 4/28/13 |
| F | 7.003 | Submitting an empty event | Submit empty data into the event creation form | Put nothing into the form for calendar event and hit submit | Empty calendar, with no other dates | Error: "You must fill in all required fields" | | | Ryan | 4/28/13 |
| P | 7.004 | Editing an event | Select an event to edit and sign into Google calendar settings to edit event. | Sign into Google Calendar using credentials and select an event to edit. | Calendar embed in web page untouched. | Selected event will be edited using Google credentials of profile containing calendar. | | | Ryan | 4/28/13 |
| F | = Unit Summary | | 75% passing | | 3 passed | | Date of last test = | | 4/28/13 | |
| | 4 tests | | | | 1 failed | | | | | |

[Directory Page](#)



Unit Test: System Administration

WORMS

System Administration

Initial configuration of the system

| Test Cases | | | | | | | | | | |
|--------------------------------|-------------|------------------------|--|---|--|--|-----------------------------|--|-----------|-----------|
| Pass/Fail Status | Test Number | Description | Action to perform test (input) | Steps to be Executed | State Before Test | Expected result | Observed result | Comments | Tested By | Test Date |
| F | 8.001 | Add Conference Chair | Add a conference chair on the admin page | Add a conference chair email, register with that email and ensure that appropriate permissions are given | No conference chair with the test email exists in the system | Registering with the test email will allow the user to access conference configuration options | | Not Implemented | Ryan | 4/28/13 |
| F | 8.002 | Add Submission Chair | Add a submission chair on the admin page | Add a submission chair email, register with that email and ensure that the user is able to view submissions | No submission chair with the test email exists in the system | Registering with the test email will allow the user to view submissions | | Not Implemented | Ryan | 4/28/13 |
| F | 8.004 | View submissions | Navigate to the admin's submissions page | Navigate to the admin's submissions page, ensure that all submissions are viewable | Submissions have been made in the system. | System Admin can view all submissions on the admin page | | Not Implemented - this feature is available to the submission chair, however | Ryan | 4/28/13 |
| F | 8.004 | View reviews | Navigate to the admin's reviews page | Navigate to the admin's reviews page, ensure that all submissions are viewable | Reviews have been made in the system. | System Admin can view all reviews on the admin page | | Not implemented | Ryan | 4/28/13 |
| F | 8.005 | Registration Questions | Configure Registration Questions | Enter questions in to the proper form to be submitted to the system | Empty form | New registration questions are shown to a user in the registration form. | | Not implemented | Ryan | 4/28/13 |
| = Unit Summary | | | 0% passing | | 0 passed | | Date of last test = 4/28/13 | | | |
| 5 tests | | | | | 5 failed | | | | | |
| Directory Page | | | | | | | | | | |

Unit Test: Conference Registration

WORMS

Conference Registration

To allow a user to register to attend a conference

| Test Cases | | | | | | | | | | |
|--------------------------------|-------------|-------------------------------------|--|---|--|--|---|----------|-----------|------------|
| Pass/Fail Status | Test Number | Description | Action to perform test (input) | Steps to be Executed | State Before Test | Expected result | Observed result | Comments | Tested By | Test Date |
| F | 9.001 | Successful registration | Register for the conference by selecting meal type and workshop. | Select Meal and Workshop from drop down menu and click Register | Status Unregistered | Status: Registered for the Conference | | | Eduardo | 04/23/2013 |
| P | 9.002 | Conflicting Workshop Choices | Attempt to register for two simultaneous workshops | Choose 2 or more different simultaneous workshops | Registration form is filled out except for workshops | Error Message: "Workshop selections are in conflicting times." | | | Eduardo | 04/23/2013 |
| F | 9.003 | Additional Meal Tickets | Request Additional Meal Tickets | Navigate to the conference registration page. Request additional meal tickets | Registered successfully for conference | Additional meal tickets show up on the registration page | | | Eduardo | 04/23/2013 |
| F | 9.004 | Display meal and workshop selection | Register with meal and workshop selection | Register for conference with meal and workshop selection | Empty form and account is unregistered | Successful registration with meal and workshop selection | Only the meal choice is successfully registered | | Ryan | 4/28/13 |
| = Unit Summary | | | 33% passing | | 1 passed | | Date of last test = 1/0/00 | | | |
| 3 tests | | | | | 2 failed | | | | | |
| Directory Page | | | | | | | | | | |



Unit Test: Submission Chair

WORMS

Submission Chair

To allow a user to register to attend a conference

| Pass/Fail Status | Test Cases | | Action to perform test (input) | Steps to be Executed | State Before Test | Expected result | Observed result | Comments | Tested By | Test Date |
|------------------|--------------------------------|--|--|--|--|--|--|---------------------|-----------|------------|
| | Test Number | Description | | | | | | | | |
| F | 9.001 | Radio button to specific scholarly work displays correct information | Select radio button for various scholarly works and validate with database if information is correct | Select radio button for specific scholarly work and validate if information displayed is correct | Radio button selected on default | Information displayed is correct information about scholarly work | | | Eduardo | 04/23/2013 |
| P | 9.002 | Displaying scholarly works by certain attribute is correct | List scholarly works by chosen attributes | Select attribute to organize scholarly works display on page | Default scholarly work and list type selected | Results of scholarly works displayed in order of selected attribute | | | Eduardo | 04/23/2013 |
| F | 9.003 | Successful download of scholarly work | Choose scholarly work to be downloaded, download, and check client Downloads folder for file | Choose scholarly work to be downloaded, download, and check client Downloads folder for file | Empty form and default radio button selected | Successful download of scholarly work in client Downloads folder | | | Eduardo | 04/23/2013 |
| F | 9.004 | Accept/Reject reviewer applications | Check applications of reviewers wanting to be submitted and select accept or reject | Check applications of reviewers wanting to be submitted and select accept or reject | Reviewer applications have not been accepted or rejected | Reviewers will be successfully accepted or rejected into the conferece | Reviewers can be accepted or rejected, but applications and credentials cannot be viewed | | Ryan | 4/28/13 |
| F | = Unit Summary | | 25% | passing | 1 | passed | | Date of last test = | | 1/0/00 |
| | 4 tests | | | | 3 | failed | | | | |
| | Directory Page | | | | | | | | | |



16. Appendix E: Database Schema

```

-----
-- Table `perm_trace`.`user`
-----
CREATE TABLE IF NOT EXISTS `perm_trace`.`user` (
  `id` INT NOT NULL AUTO_INCREMENT ,
  `first_name` VARCHAR(100) NOT NULL ,
  `last_name` VARCHAR(100) NOT NULL ,
  `email` VARCHAR(100) NOT NULL ,
  `password_hash` BINARY(32) NOT NULL ,
  `personal_title` VARCHAR(10) NULL ,
  `phone_number` VARCHAR(20) NULL ,
  `department` VARCHAR(100) NULL ,
  `position` VARCHAR(100) NULL ,
  `city` VARCHAR(100) NOT NULL ,
  `country` VARCHAR(100) NOT NULL ,
  `zip_code` CHAR(5) NULL ,
  `state_territory_province` VARCHAR(100) NULL ,
  `street_address` VARCHAR(400) NULL ,
  `is_conference_chair` TINYINT(1) NOT NULL ,
  `is_registered` TINYINT(1) NOT NULL ,
  `is_accepted_reviewer` TINYINT(1) NOT NULL ,
  `reviewer_credentials` TEXT NULL ,
  `programming_contest_team_name` VARCHAR(30) NULL ,
  `school_name` VARCHAR(80) NOT NULL ,
  PRIMARY KEY (`id`, `school_name`),
  INDEX `fk_user_programming_contest_team1_idx`
  (`programming_contest_team_name` ASC) ,
  UNIQUE INDEX `email_UNIQUE` (`email` ASC) ,
  INDEX `fk_user_school1_idx` (`school_name` ASC) ,
  CONSTRAINT `fk_user_programming_contest_team1`
  FOREIGN KEY (`programming_contest_team_name` )
  REFERENCES `perm_trace`.`programming_contest_team` (`name` )
  ON DELETE NO ACTION
  ON UPDATE NO ACTION,
  CONSTRAINT `fk_user_school1`
  FOREIGN KEY (`school_name` )
  REFERENCES `perm_trace`.`school` (`name` )
  ON DELETE NO ACTION
  ON UPDATE NO ACTION)
ENGINE = InnoDB;

```



```

-----
-- Table `perm_trace`.`scholarly_work_type`
-----
CREATE TABLE IF NOT EXISTS `perm_trace`.`scholarly_work_type` (
  `name` VARCHAR(50) NOT NULL ,
  `chair_id` INT NOT NULL ,
  `submission_deadline` DATE NULL ,
  PRIMARY KEY (`name`) ,
  INDEX `fk_scholarly_work_type_user1_idx` (`chair_id` ASC) ,
  CONSTRAINT `fk_scholarly_work_type_user1`
    FOREIGN KEY (`chair_id`)
      REFERENCES `perm_trace`.`user` (`id`)
      ON DELETE NO ACTION
      ON UPDATE NO ACTION)
ENGINE = InnoDB;

-----
-- Table `perm_trace`.`scholarly_work`
-----
CREATE TABLE IF NOT EXISTS `perm_trace`.`scholarly_work` (
  `id` INT NOT NULL ,
  `submiter_id` INT NOT NULL ,
  `type_name` VARCHAR(50) NOT NULL ,
  `submission_date` DATE NOT NULL ,
  `file_name` CHAR(64) NOT NULL ,
  `accepted` TINYINT(1) NOT NULL ,
  PRIMARY KEY (`id`) ,
  INDEX `fk_scholarly_works_users_idx` (`submiter_id` ASC) ,
  INDEX `fk_scholarly_work_scholarly_work_type1_idx` (`type_name` ASC)
,
  CONSTRAINT `fk_scholarly_works_users`
    FOREIGN KEY (`submiter_id`)
      REFERENCES `perm_trace`.`user` (`id`)
      ON DELETE NO ACTION
      ON UPDATE NO ACTION,
  CONSTRAINT `fk_scholarly_work_scholarly_work_type1`
    FOREIGN KEY (`type_name`)
      REFERENCES `perm_trace`.`scholarly_work_type` (`name`)
      ON DELETE NO ACTION
      ON UPDATE NO ACTION)
ENGINE = InnoDB;

```



```

-----
-- Table `perm_trace`.`review`
-----
CREATE TABLE IF NOT EXISTS `perm_trace`.`review` (
  `scholarly_work_id` INT NOT NULL ,
  `reviewer_id` INT NOT NULL ,
  `comments` TEXT NULL ,
  `date` DATE NULL ,
  `grade` INT NULL ,
  PRIMARY KEY (`scholarly_work_id`, `reviewer_id`) ,
  INDEX `fk_scholarly_work_has_user_user1_idx` (`reviewer_id` ASC) ,
  INDEX `fk_scholarly_work_has_user_scholarly_work1_idx`
(`scholarly_work_id` ASC) ,
  CONSTRAINT `fk_scholarly_work_has_user_scholarly_work1`
  FOREIGN KEY (`scholarly_work_id`)
  REFERENCES `perm_trace`.`scholarly_work` (`id`)
  ON DELETE NO ACTION
  ON UPDATE NO ACTION,
  CONSTRAINT `fk_scholarly_work_has_user_user1`
  FOREIGN KEY (`reviewer_id`)
  REFERENCES `perm_trace`.`user` (`id`)
  ON DELETE NO ACTION
  ON UPDATE NO ACTION)
ENGINE = InnoDB;

```

```

-----
-- Table `perm_trace`.`topic`
-----
CREATE TABLE IF NOT EXISTS `perm_trace`.`topic` (
  `name` VARCHAR(30) NOT NULL ,
  `description` VARCHAR(200) NOT NULL ,
  PRIMARY KEY (`name`) )
ENGINE = InnoDB;

```

```

-----
-- Table `perm_trace`.`meal`
-----
CREATE TABLE IF NOT EXISTS `perm_trace`.`meal` (
  `name` VARCHAR(30) NOT NULL ,
  `description` VARCHAR(300) NOT NULL ,
  `price` DECIMAL(10,2) NOT NULL ,
  PRIMARY KEY (`name`) )
ENGINE = InnoDB;

```



```

-----
-- Table `perm_trace`.`reviewer_has_interest`
-----
CREATE TABLE IF NOT EXISTS `perm_trace`.`reviewer_has_interest` (
  `reviewer_id` INT NOT NULL ,
  `topic_name` VARCHAR(30) NOT NULL ,
  PRIMARY KEY (`reviewer_id`, `topic_name`) ,
  INDEX `fk_user_has_topic_topic1_idx` (`topic_name` ASC) ,
  INDEX `fk_user_has_topic_user1_idx` (`reviewer_id` ASC) ,
  CONSTRAINT `fk_user_has_topic_user1`
    FOREIGN KEY (`reviewer_id`)
      REFERENCES `perm_trace`.`user` (`id`)
      ON DELETE NO ACTION
      ON UPDATE NO ACTION,
  CONSTRAINT `fk_user_has_topic_topic1`
    FOREIGN KEY (`topic_name`)
      REFERENCES `perm_trace`.`topic` (`name`)
      ON DELETE NO ACTION
      ON UPDATE NO ACTION)
ENGINE = InnoDB;

-----
-- Table `perm_trace`.`scholarly_work_has_topic`
-----
CREATE TABLE IF NOT EXISTS `perm_trace`.`scholarly_work_has_topic` (
  `scholarly_work_id` INT NOT NULL ,
  `topic_name` VARCHAR(30) NOT NULL ,
  PRIMARY KEY (`scholarly_work_id`, `topic_name`) ,
  INDEX `fk_scholarly_work_has_topic_topic1_idx` (`topic_name` ASC) ,
  INDEX `fk_scholarly_work_has_topic_scholarly_work1_idx`
(`scholarly_work_id` ASC) ,
  CONSTRAINT `fk_scholarly_work_has_topic_scholarly_work1`
    FOREIGN KEY (`scholarly_work_id`)
      REFERENCES `perm_trace`.`scholarly_work` (`id`)
      ON DELETE NO ACTION
      ON UPDATE NO ACTION,
  CONSTRAINT `fk_scholarly_work_has_topic_topic1`
    FOREIGN KEY (`topic_name`)
      REFERENCES `perm_trace`.`topic` (`name`)
      ON DELETE NO ACTION
      ON UPDATE NO ACTION)
ENGINE = InnoDB;

```



```

-----
-- Table `perm_trace`.`meal_ticket`
-----
CREATE TABLE IF NOT EXISTS `perm_trace`.`meal_ticket` (
  `user_id` INT NOT NULL ,
  `meal_name` VARCHAR(30) NOT NULL ,
  PRIMARY KEY (`user_id`, `meal_name`) ,
  INDEX `fk_user_has_meal_meal1_idx` (`meal_name` ASC) ,
  INDEX `fk_user_has_meal_user1_idx` (`user_id` ASC) ,
  CONSTRAINT `fk_user_has_meal_user1`
    FOREIGN KEY (`user_id`)
      REFERENCES `perm_trace`.`user` (`id` )
    ON DELETE NO ACTION
    ON UPDATE NO ACTION,
  CONSTRAINT `fk_user_has_meal_meal1`
    FOREIGN KEY (`meal_name`)
      REFERENCES `perm_trace`.`meal` (`name` )
    ON DELETE NO ACTION
    ON UPDATE NO ACTION)
ENGINE = InnoDB;

```

```

-----
-- Table `perm_trace`.`event`
-----
CREATE TABLE IF NOT EXISTS `perm_trace`.`event` (
  `name` VARCHAR(50) NOT NULL ,
  `description` VARCHAR(400) NULL ,
  `start_time` DATETIME NOT NULL ,
  `end_time` DATETIME NOT NULL ,
  `location` VARCHAR(50) NOT NULL ,
  PRIMARY KEY (`name`) ,
  INDEX `time_idx` (`start_time` ASC) )
ENGINE = InnoDB;

```

```

-----
-- Table `perm_trace`.`school`
-----
CREATE TABLE IF NOT EXISTS `perm_trace`.`school` (
  `name` VARCHAR(80) NOT NULL ,
  PRIMARY KEY (`name`) )
ENGINE = InnoDB;

```




```

-----
-- Table `perm_trace`.`user_attends`
-----
CREATE TABLE IF NOT EXISTS `perm_trace`.`user_attends` (
  `user_id` INT NOT NULL ,
  `event_name` VARCHAR(50) NOT NULL ,
  PRIMARY KEY (`user_id`, `event_name`) ,
  INDEX `fk_user_has_event_event1_idx` (`event_name` ASC) ,
  INDEX `fk_user_has_event_user1_idx` (`user_id` ASC) ,
  CONSTRAINT `fk_user_has_event_user1`
    FOREIGN KEY (`user_id`)
      REFERENCES `perm_trace`.`user` (`id`)
      ON DELETE NO ACTION
      ON UPDATE NO ACTION,
  CONSTRAINT `fk_user_has_event_event1`
    FOREIGN KEY (`event_name`)
      REFERENCES `perm_trace`.`event` (`name`)
      ON DELETE NO ACTION
      ON UPDATE NO ACTION)
ENGINE = InnoDB;

-----
-- Table `perm_trace`.`programming_contest_team`
-----
CREATE TABLE IF NOT EXISTS `perm_trace`.`programming_contest_team` (
  `name` VARCHAR(30) NOT NULL ,
  `school` VARCHAR(100) NOT NULL ,
  `advisor_id` INT NOT NULL ,
  PRIMARY KEY (`name`) ,
  INDEX `fk_programming_contest_team_user1_idx` (`advisor_id` ASC) ,
  CONSTRAINT `fk_programming_contest_team_user1`
    FOREIGN KEY (`advisor_id`)
      REFERENCES `perm_trace`.`user` (`id`)
      ON DELETE NO ACTION
      ON UPDATE NO ACTION)
ENGINE = InnoDB;

```



17. Appendix F: User Displays

The user will see this page before logging in.

The screenshot shows the registration page for the CCSCNE 2013 conference. The page has a dark blue header with the CCSCNE logo and "Siena College 2013". On the left, there is a login section with fields for "E-mail" (containing "confchair@test.com") and "Password" (masked with dots). Below these are "Login" and "Create Account" links. The main content area has two tabs: "General Information" (selected) and "Schedule". The "General Information" tab contains three paragraphs of text describing the conference. At the bottom, there is a "TRACE Technologies" logo.

CCSCNE
Siena College 2013

E-mail
confchair@test.com
Password
.....
[Login](#)
[Create Account](#)

[General Information](#) [Schedule](#)

CCSCNE 2013 is the 18th Annual Conference of the Northeast region of the Consortium for Computing Sciences in Colleges (CCSC). The conference is held in cooperation with the ACM SIGCSE and Upsilon Pi Epsilon Honors Society and is hosted by Siena College in Loudonville, NY.

CCSCNE is the northeastern region of the national Consortium for Computing Sciences in Colleges (CCSC). Started in 1996, CCSCNE is one of the largest regions of CCSC.

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CCSCNE holds a refereed conference every Spring, also called CCSCNE. This conference draws participants from all over the northeast and eastern United States. The proceedings of the conference are published as an issue of the Journal of Computing Sciences in Colleges.

[TRACE Technologies](#)



The user will use this page to create an account.

CCSCNE

Siena College 2013

Create Account

[Home](#)

| | |
|----------------------------|---|
| School | <input type="text" value="Siena"/> |
| Department | <input type="text" value="CSIS"/> |
| Title | <input type="text" value="Mr."/> |
| Academic Title / Job Title | <input type="text"/> |
| First Name* | <input type="text" value="Tyler"/> |
| Last Name* | <input type="text" value="Vorpahl"/> |
| Address Line 1 | <input type="text" value="515 Loudon Road"/> |
| Address Line 2 | <input type="text"/> |
| ZIP Code | <input type="text" value="12211"/> |
| City | <input type="text" value="Loudonville"/> |
| State | <input type="text" value="NY"/> |
| Country | <input type="text" value="United States"/> |
| Phone | <input type="text" value="518-555-1829"/> |
| Email* | <input type="text" value="tt15vorp@siena.edu"/> |
| Homepage | <input type="text" value="TRACE Technologies"/> |
| Password* | <input type="password" value="....."/> |
| Re-type Password* | <input type="password" value="....."/> |

[TRACE Technologies](#)



The user will view the schedule on this page.

CCSCNE
Siena College 2013

E-mail

Password

[Login](#)
[Create Account](#)

General Information | **Schedule**

trace.worms@gmail.com
Today | Friday, April 26

Friday, May 3

| | |
|---------|--|
| 7:45am | Programming Contest Breakfast and Registration |
| 8:45am | Initial Meeting & Presentation of Problems |
| 9:00am | Programming Contest |
| 9:00am | Workshop 1 |
| 9:00am | Workshop 2 |
| 9:00am | Workshop 3 |
| 9:00am | Workshop 4 |
| 10:00am | Registration |
| 10:00am | Vendor Displays |
| 12:00pm | Lunch |
| 1:00pm | Welcome Address |
| 1:15pm | Plenary Session |

Events shown in time zone: Eastern Time [Google Calendar](#)

[TRACE Technologies](#)



This is the home page for a user with Submission Chair capabilities.

CCSCNE

Siena College 2013

Welcome, **Jim** ([logout](#))

Menu

- [Home](#)
- [Submit](#)
- [Review](#)
- [Submission Chair](#)
- [Conference Registration](#)

[General Information](#) [Schedule](#)

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[TRACE Technologies](#)



A Submission Chair can process Reviewer applications here.

CCSCNE

Siena College 2013

Welcome, **Jim** ([logout](#))

Menu

- Home
- Submit
- Review
- Submission Chair**
- Conference Registration

Submissions | **Reviewer Applications**

| Name | Email | |
|---------------|--------------------|---------------------------------------|
| Ryan Kennedy | rp31kenn@siena.edu | Accepted |
| Alyssa Nghiem | aa30nghi@siena.edu | Accepted |
| Tyler Vorpahl | tt15vorp@siena.edu | <input type="button" value="Accept"/> |

[TRACE Technologies](#)



A Submission Chair can process submissions here.

CCSCNE
Siena College 2013

Welcome, **Jim** ([logout](#))

Menu

- Home
- Submit
- Review
- Submission Chair**
- Conference Registration

Submissions | Reviewer Applications

Sort By: Ascending Descending

| | Title | Author | Date | Status |
|----------------------------------|----------------------------------|---------------|------------|----------|
| <input type="radio"/> | Introducing Parallel Programming | Ryan Kennedy | 04/25/2013 | |
| <input checked="" type="radio"/> | Unclustered B+ Trees | Tyler Vorpahl | 04/26/2013 | Rejected |

Title: Unclustered B+ Trees
Author: Tyler Vorpahl
Topics: Advanced CS Curriculum
[Submission PDF](#)
Reviewers:
Rejected

TRACE Technologies



A Reviewer uses this page to view assigned works.

CCSCNE

Siena College 2013

Welcome, **Tyler**
([logout](#))

Menu

- Home
- Submit
- Review**
- Conference Registration

Assigned Works

Clicking the download link next to the paper title will allow you to download and read the paper. Download the review template [here](#), fill it out, and submit it by clicking the submit button next to the appropriate title when ready.

Choose a work to review

- Introducing Parallel Programming

Title: Introducing Parallel Programming
Topics: Advanced CS Curriculum, Computer Science Education

Download

Select your review document: No file chosen

[TRACE Technologies](#)



A Submitter submits a work using this page.

CCSCNE

Siena College 2013

Welcome, Tyler
([logout](#))

Menu

Home

Submit

Review

Conference
Registration

Submit a workView my submissions

Two files must be submitted: one normal version and one anonymous version, which may not have any identifying information about the author.

Submission Type:

Submission Title:

Topics:

- Advanced CS Curriculum
- Computer Science Education
- Computing courses for non-majo
- Ethics and computing
- First Year Computing

Regular submission: Unclusted B Trees.pdf

Anonymous submission: No file chosen

TRACE Technologies



A Conference Chair can configure the topics.

The screenshot displays the CCSCNE Siena College 2013 web interface. At the top, the logo 'CCSCNE Siena College 2013' is visible. On the left side, there is a navigation menu with the following items: 'Welcome, Darren (logout)', 'Menu', 'Home', 'Submit', 'Review', 'Conference Chair' (highlighted in yellow), and 'Conference Registration'. The main content area is titled 'Configure Topics' and contains a list of topics: 'Advanced CS Curriculum', 'Computer Science Education', 'Computing courses for non-r', 'Ethics and computing', 'First Year Computing', 'Grants and the small college', 'K-12 Computing Curricula', and 'Student Research'. Below the list, there are 'Add' and 'Remove' buttons.



This is a Conference Chair's home page.

CCSCNE

Siena College 2013

Welcome, **Darren**
([logout](#))

Menu

- [Home](#)
- [Submit](#)
- [Review](#)
- [Conference Chair](#)
- [Conference Registration](#)

[General Information](#) [Schedule](#)

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[TRACE Technologies](#)



A Submitter can view everything that has been submitted and the acceptance status at this page.

CCSCNE

Siena College 2013

Welcome, Tyler
([logout](#))

[Submit a work](#) [View my submissions](#)

| Title | Submission Date | Status |
|----------------------|-----------------|---------|
| Unclustered B+ Trees | 4/26/2013 | Pending |

Menu

- Home
- Submit**
- Review
- Conference Registration

TRACE Technologies