ID-10t Consultants

Generation Java
Preliminary Design

Roger Bacon Science Center, Room 328
December 3, 2008
8:15 am

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Department of Computer Science
Siena College

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Welcome

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Team Members

- ❖ **Product Overview**

- ❖ Data Flow & Structure Diagrams

- ❖ Data Dictionary

- ❖ Test Plan

- ❖ Prototypes
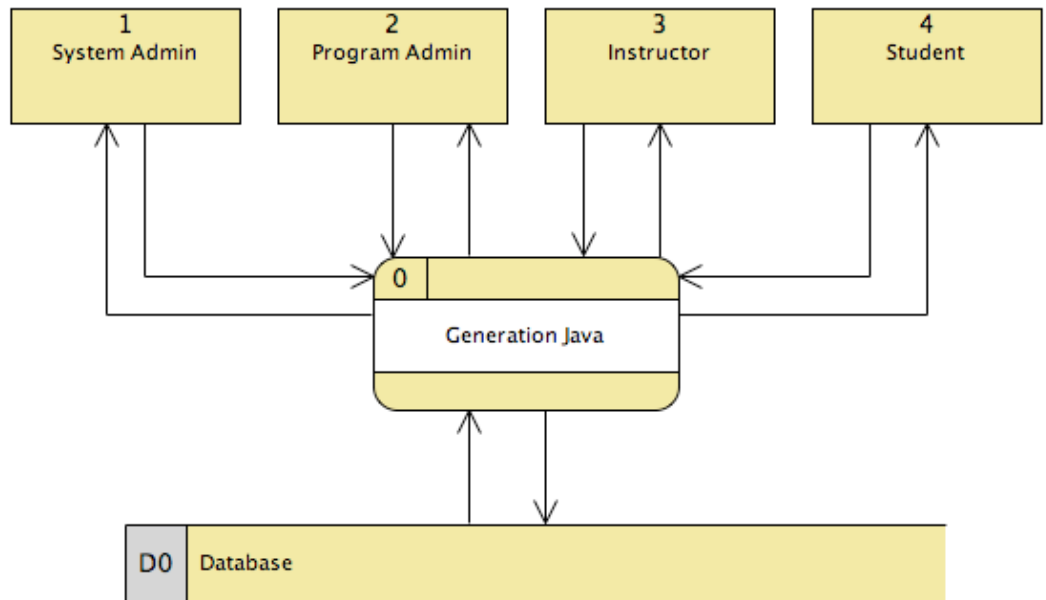
- ❖ Status & Conclusion

Agenda

- Generation Java will provide services to:
  - **Students**

  - **Instructors**

  - **Administrators**
    - **System**
    - **Program**
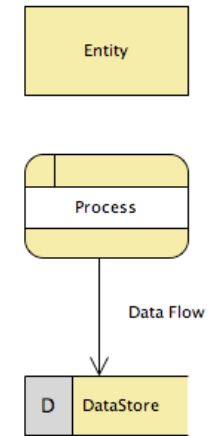
Introduction & Product Overview

- ❖ Introduction & Product Overview

- ❖ **Data Flow & Structure Diagrams**

- ❖ Data Dictionary

- ❖ Test Plan

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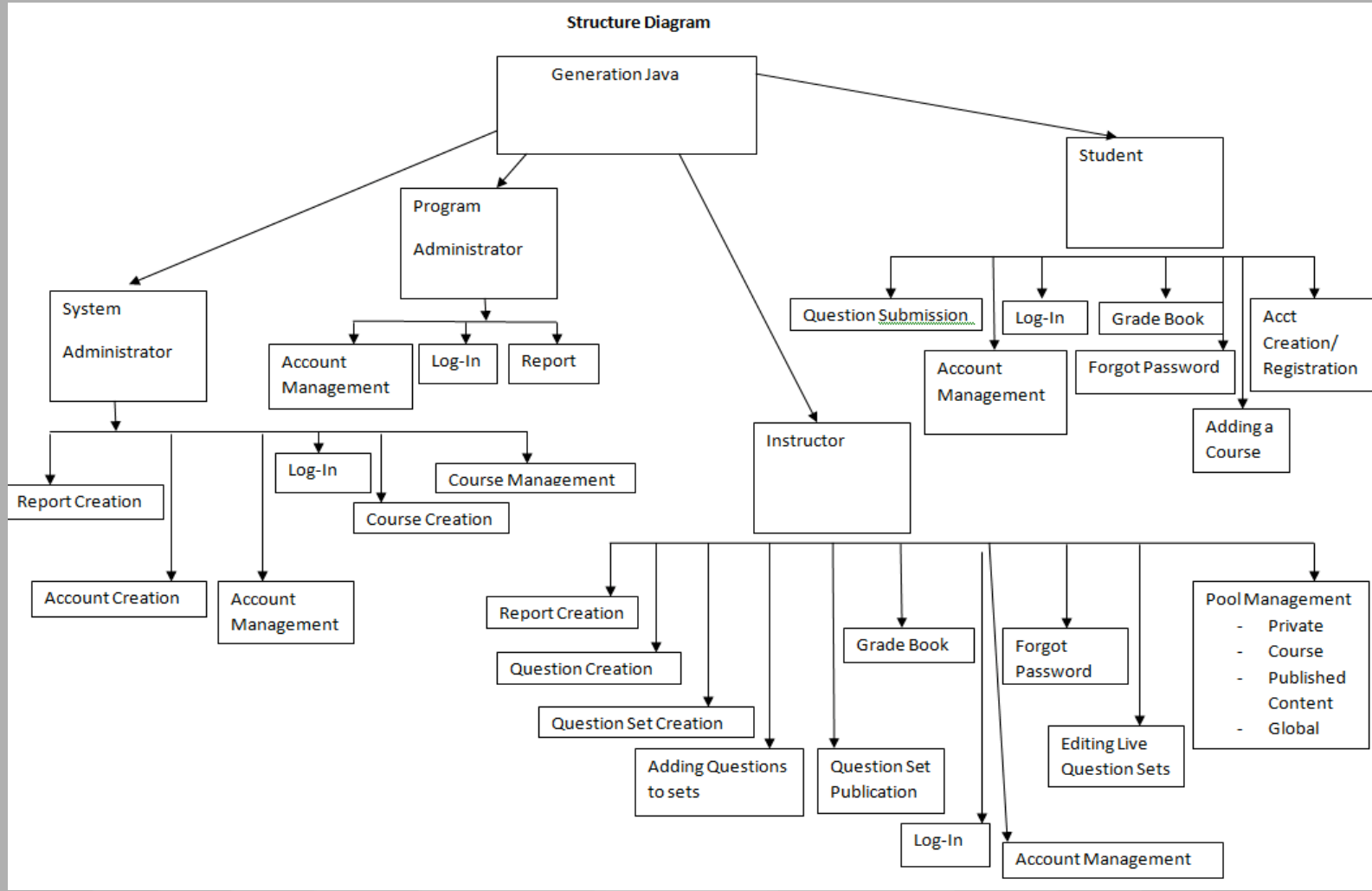- ❖ Status and Conclusion

Agenda

Data Flow Diagrams

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Preliminary Design
Presentation

Structure Diagram

❖ Introduction & Product Overview

❖ Data Flow & Structure Diagrams

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Presentation

ID-10t Consulants
Data Dictionary

Date: 11/20/08

TABLE	COLUMN	DATA TYPE	DESCRIPTION	NOTES	VALIDATION
students	std_id	VARCHAR(8)	Siena College network login -first & middle initial -the day of the month you were born (two digits) -the first four letters of your last name	Required: Primary Key Varations/Exceptions: -If you have no middle initial, just skip it -if you have an apostrophie in your name (e.g., O'Brien), leave it out -if your last name is less than four letters, write what you have	AlphaNumeric -option 1: two chars, two digits, & at least two chars -option 2: one char, two digits, & at least two chars
students	std_email	VARCHAR(30)	student's e-mail address		
students	std_fname	VARCHAR(20)	student's first name		
students	std_lname	VARCHAR(20)	student's last name		
students	std_password	VARCHAR(15)	student's password	Chosen by student at account creation	AlphaNumeric

Data Dictionary

TABLE	COLUMN	DATA TYPE	DESCRIPTION	NOTES
prg_adm	prg_email	VARCHAR(30)	program administrator's e-mail address	
prg_adm	prg_fname	VARCHAR(20)	program administrator's first name	
prg_adm	prg_lname	VARCHAR(20)	program administrator's last name	
prg_adm	prg_password	VARCHAR(15)	program administrator's password	Chosen by the system administrator at account creation
prg_adm	prg_course	VARCHAR(10)	program administrator coordinates the specified course, section-wide	Chosen by the system administrator at account creation
course	course_number	VARCHAR(10)	course subject followed by course number and section number	Required: Primary Key Ex. CSIS220-10
course	course_name	VARCHAR(30)	course name	
course	semester	VARCHAR(10)	semester in which the course is offered	Chosen by the system administrator at course creation
course	course_inst	VARCHAR(20)	course instructor	
course	course_pw	VARCHAR(15)	course password	Chosen by the system administrator at course creation

Data Dictionary

- ❖ Introduction & Product Overview

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Agenda

- Software Testing

  - **Unit Testing**
  - Integration
  - System Testing
  - Performance Testing
  - Acceptance Testing

Test Plan

Unit 5   Student Home Page

Note: Assume a Student has successfully logged in. A student refers to a Student user, or any user in the Student view.

Test Case

Pass/Fail	Number	Step	Description	Action Needed	Expected Result	Observed Result	Comments
	5.001	Student Home Page loads	Correct page loads	N/A	Student Home Page loads and is appropriately displayed		
	5.002	Home button clicked	A Student wishes to go to the Home Page	Student clicks the "Home" link	Student Home Page is loads and is appropriately displayed		
	5.003	Gradebook button clicked	A Student wishes to view the Gradebook	Student clicks the "Gradebook" link	Student Gradebook is correctly reloaded		
	5.004	Current course clicked	A Student wishes to view the page of a particular current course	Student clicks a current course	Correct page is loaded for the given course		
	5.005	Completed course clicked	A Student wishes to view the page of a particular completed course	Student clicks a completed course	Correct page is loaded for the given course		
	5.006	Logout button clicked	A Student wishes to log out	Student clicks the logout button	The user is successfully logged out and redirected to the login screen		
= Summary of Tests for This Unit							

Test Plan

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Test Plan

Unit 6			Administrator Account Creation Page				
			Note: This is done by the System Administrator in order to create Student, Instructor, and Program Administrator accounts.				
		Test Case					
Pass/Fail	Number	Step	Description	Action Needed	Expected Result	Observed Result	Comments
	6.001	Administrator Account Creation page loads	Correct page loads	N/A	Administrator Account Creation page loads and is appropriately displayed		
	6.002	Enter accepted first name	System Administrator enters first name with no illegal characers.	Input first name	No illegal characters, the name is accepted		
	6.003	Enter unaccepted first name	System Administrator enters first name with illegal characers	Input first name	Page reloaded with proper error message displayed		
	6.004	Enter accepted last name	System Administrator enters last name with no illegal characters	Input last name	No illegal characters, the name is accepted		
	6.005	Enter unaccepted last name	System Administrator enters last name with illegal characters.	Input last name	Page reloaded with proper error message displayed		
	6.006	Enter accepted email address	System Administrator enters a unique and valid email address with legal characters	Input email address	No illegal characters, the email address is valid. The address is accepted		

Unit 6   Administrator Account Creation Page

Note: This is done by the System Administrator in order to create Student, Instructor, and Program Administrator accounts.

Test Case

	6.007	Enter unaccepted email address	System Administrator enters a non-unique email address or one that is invalid or contains illegal characters	Input email address	Page reloaded with proper error message displayed	
	6.008	Enter accepted password	System Administrator enters a password of the proper length with no illegal characters	Input password	Password is compared to confirmation password	
	6.009	Enter unaccepted password	System Administrator enters a password not of the proper length or containing illegal characters	Input password	Page reloaded with proper error message displayed	
	6.010	Confirm password correctly	System Administrator retypes the password correctly	Input password	Confirmation password matches password and is accepted.	
	6.011	Confirm password incorrectly	System Administrator retypes the password incorrectly	Input password	Confirmation password does not match the password. Page reloaded with proper error message displayed.	

Test Plan

Unit 6   Administrator Account Creation Page

Note: This is done by the System Administrator in order to create Student, Instructor, and Program Administrator accounts.

Test Case

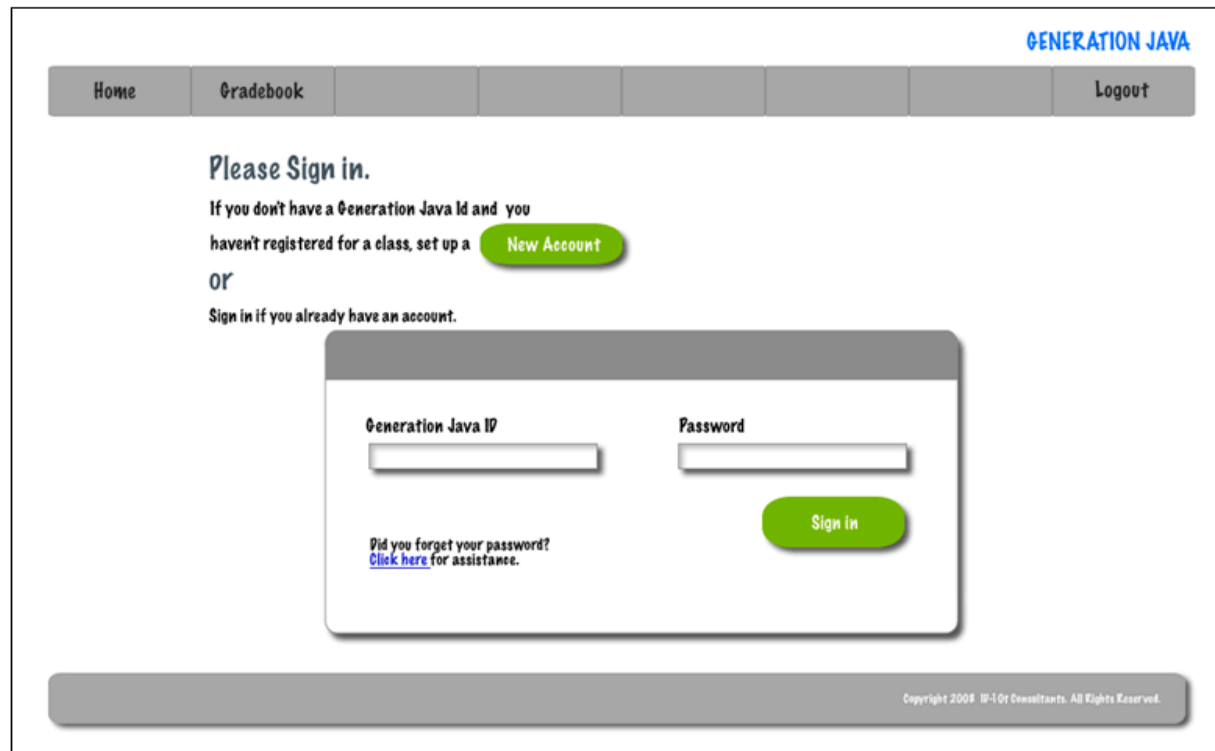|							
	6.012	Select Account Type	The type of account (Program Administrator, Instructor, or Student) is selected	System Administrator selects the account type from a drop-down menu	The user is successfully created as the specified type		
	6.013	Select Course	The new user is assigned to the given course. Students are enrolled, Instructors instruct, and Program Admininstrators moderate	System Administrator selects the course from the Course List (if desired)	The user is successfully assigned to the specified course(s)		
	6.014	Create Account button	System Administrator wishes to create the account	Student clicks "Submit"	If all fields are filled out and contain correct data, the information is stored. If a field is missing data, the proper error message is displayed.		
= Summary of Tests for This Unit							

Test Plan

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Prototypes

Section 1.11   Student Question / Question Set Answer Page
The following screen is Question/ Questions Sets answering screen for the Student.

Student   Welcome, Aaron! GENERATION JAVA

| Home | Gradebook | | | | | Logout |

1. Given 2 ints, a and b, return true if one if them is 10 or if their sum is 10.

public boolean makes10(int a, intb){}

Link to Java 1.6 API

```
public boolean makes10(int a, int b) {

}
```

Question Set: SampleQuestionSet #1
Question Point Value: 10 points

Input	Output	Correct
Hidden Cases		

Hints

makes10(9, 10) --> true
makes10(9, 9) --> false
makes10(1, 9) --> true

Save   Compile / Run

Solution

Attempts Remaining: 3/3

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Prototypes

Prototypes

Prototypes

ID-10t Consultants
Requirements Specification
Presentation

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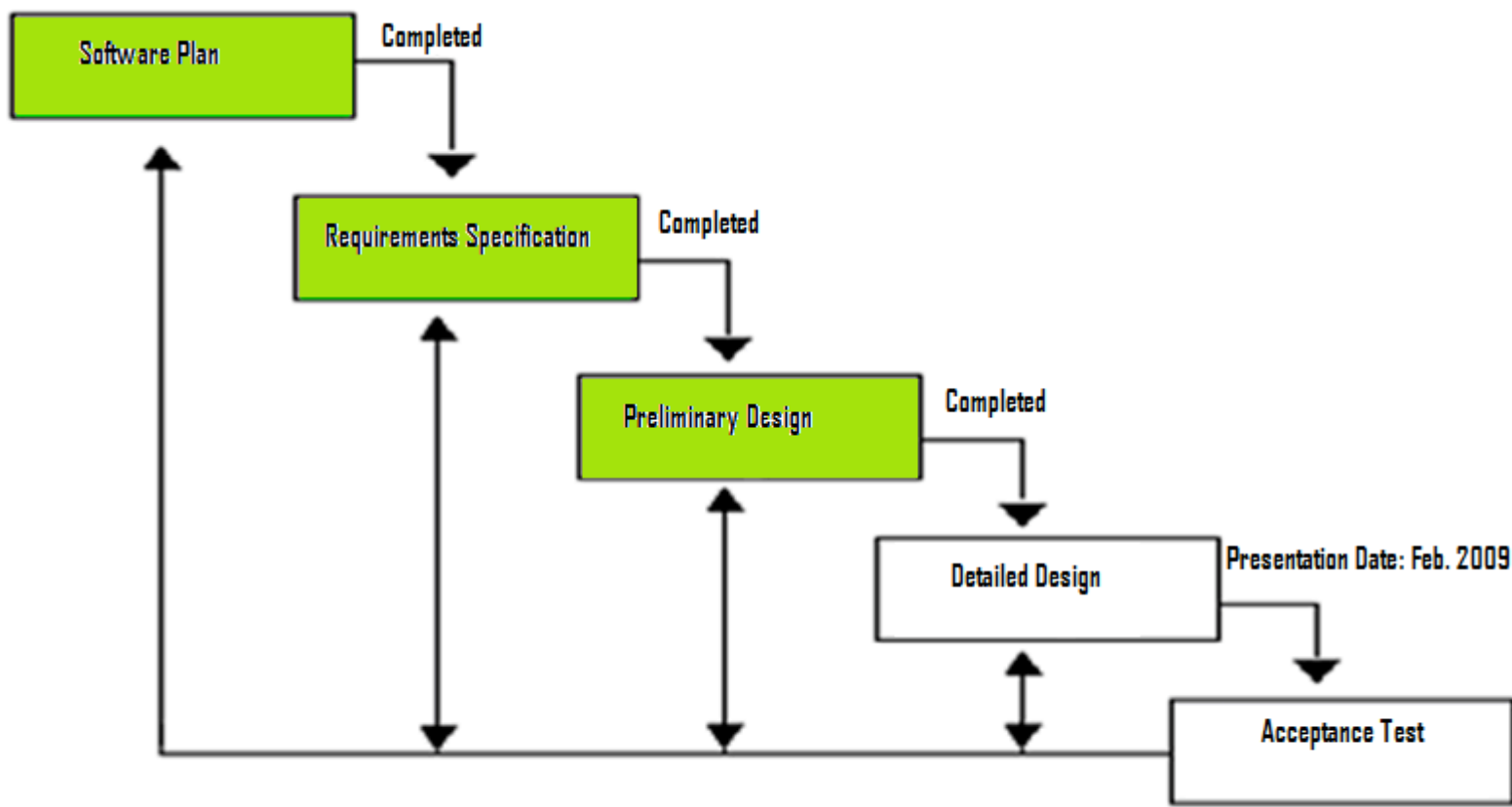# Time Line

ID-10t Consultants
Requirements Specification
Presentation

Waterfall (Linear) Model

Project Management & Development Model

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Preliminary Design
Presentation

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Thank You

Next Presentation: Detailed Design
February, 2009
Roger Bacon Science Center, Room 328