

ENTERPRISE APPLICATION DEVELOPMENT

IDS 517

(FALL SEMESTER)

GROUP

f15g116

Members

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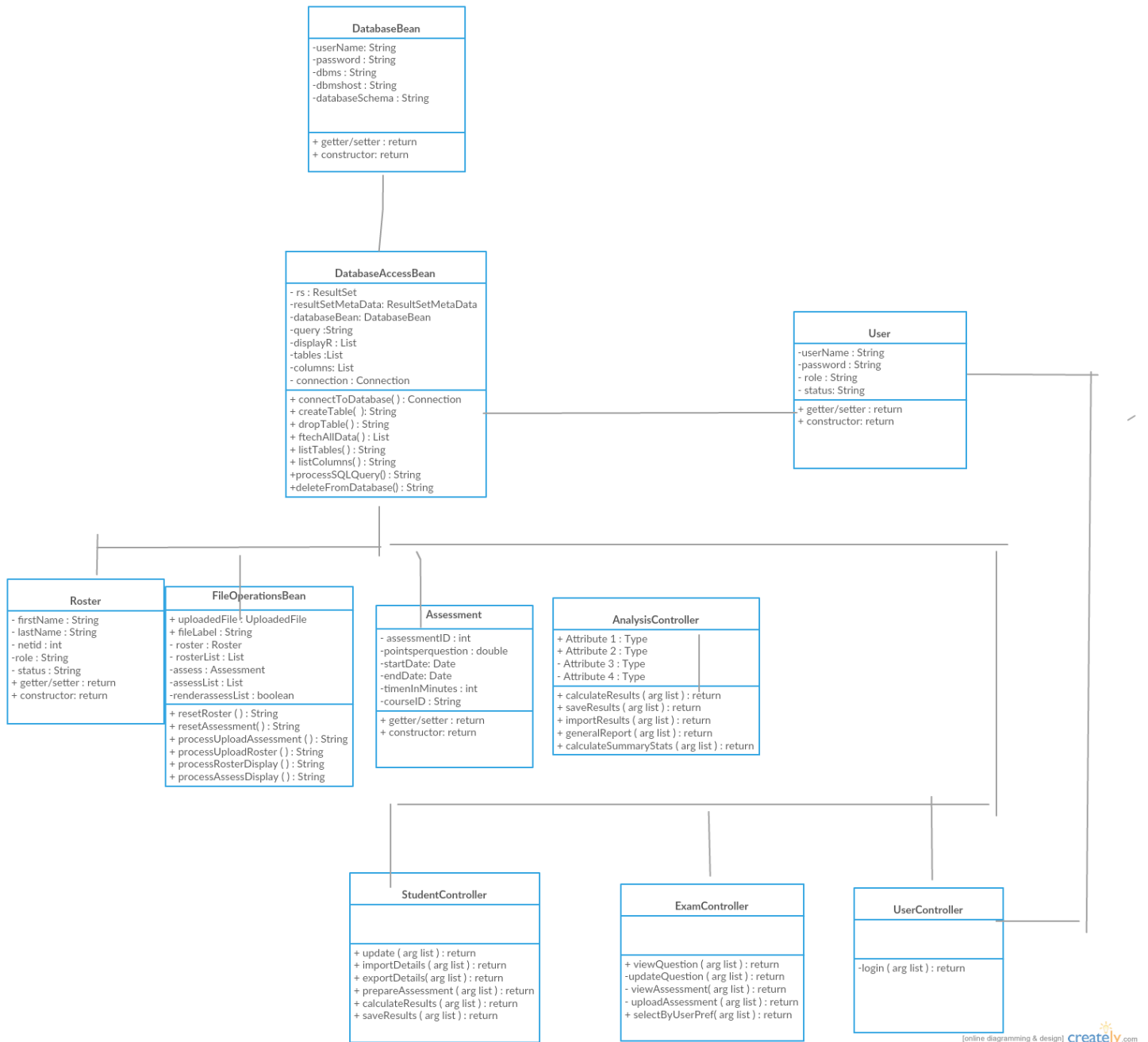
Requirements Document:

| # | Description | R | U | M | B | A | Type | Source | Criticality |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|------------|------------------|-------------|
| 1 | Application should display all items in their homepage based on category of users. | Y | Y | Y | Y | Y | Functional | Management | Critical |
| 2 | Application should allow new users to create login details using their user credentials or allow existing users to login. | Y | Y | Y | Y | Y | Functional | Management | Critical |
| 3 | Application should be able to encrypt the customer credentials and store them in the database. | Y | Y | Y | Y | Y | Technical | Data Warehousing | Important |
| 4 | Application should allow registered users to login to the website using appropriate credentials. | Y | Y | Y | Y | Y | Functional | Management | Critical |
| 5 | Application should allow registered users to view and modify the account details and personal information. | Y | Y | Y | Y | Y | Functional | Management | Critical |
| 6 | Application should maintain separate interfaces for TA's,tutors,instructors and students and content should be displayed based on the credentials entered. | Y | Y | Y | Y | Y | Technical | Data Warehousing | Critical |
| 7 | Application should display user's guide along with the ability to logout after logging in and programmer's documentation links that open in separate pages, and where appropriate subsequent pages should have content specific help links. | Y | Y | Y | Y | Y | Functional | Management | Critical |
| 8 | Application should allow instructor and TA to upload a roster of student users in .csv format as well as upload assessments. | Y | Y | Y | Y | Y | Technical | Data Warehousing | Important |
| 9 | Application should have the capability to Track each user's access to the application including date time stamp, and ip address. | Y | Y | Y | Y | Y | Technical | Data Warehousing | Important |
| 10 | Application should allow Tutor to view the roster of student users in .csv format who enrolled for the specific tutor as well as view assessment reports. | Y | Y | Y | Y | Y | Technical | Data Warehousing | Important |

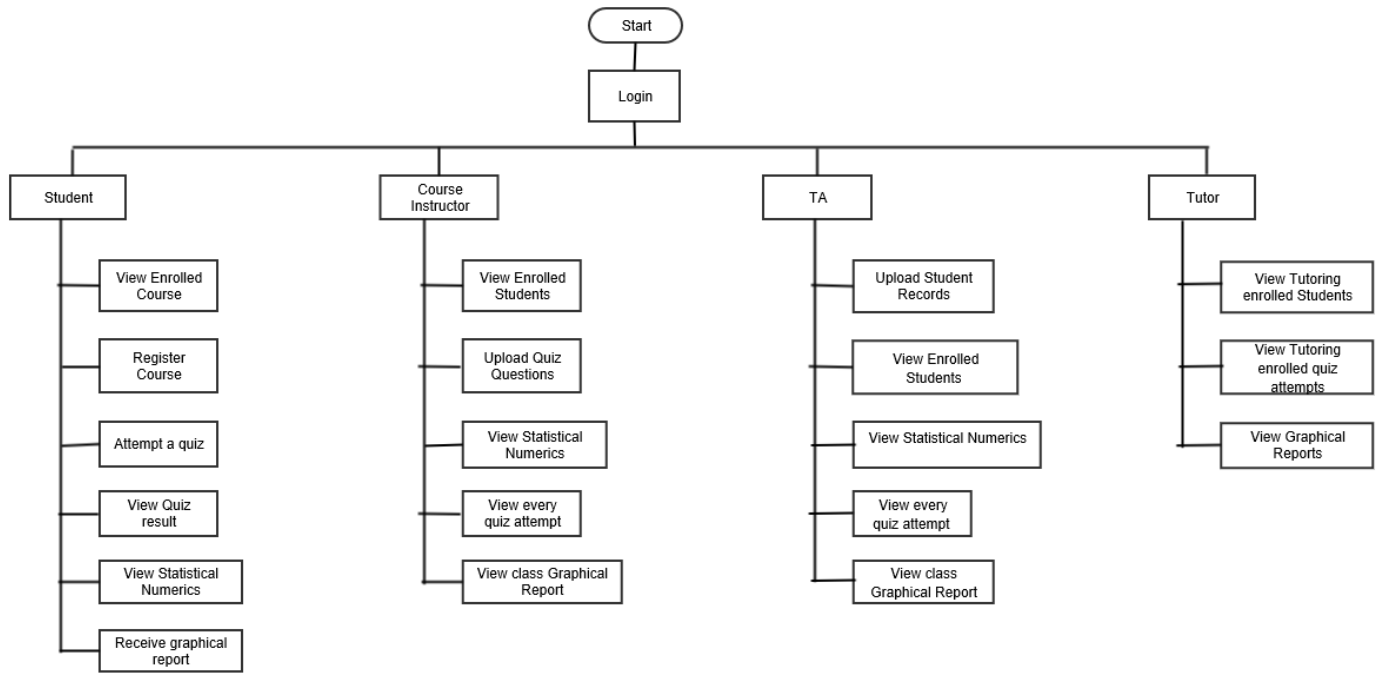
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|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|------------|------------------|-----------|
| 11 | Application should allow Students to view the roster of courses as well as have the ability to take multiple quizzes for each course the student has enrolled. The student should also be allowed to take multiple attempts for each quiz for a particular course. | Y | Y | Y | Y | Y | Technical | Data Warehousing | Important |
| 12 | Application should have file menu item in instructor and TA's page to enable upload of roster of student records along with enrolled course details from a .csv file. | Y | Y | Y | Y | Y | Functional | Management | Critical |
| 13 | Application should have the file menu items in instructor and TA's page to enable upload of questions to be used in quizzes. | Y | Y | Y | Y | Y | Functional | Management | Critical |
| 14 | Application should have the file menu item to download roster as well as general data of student records, quiz details including assessment records in .csv and XML format. | Y | Y | Y | Y | Y | Technical | Data Warehousing | Important |
| 15 | Application should have the option for students to view their assessment data and analysis specifics. | Y | Y | Y | Y | Y | Functional | Management | Critical |
| 16 | Application should have the capability to generate reports for displaying the score of assigned work, results of numeric and statistical analysis for the entire class. | Y | Y | Y | Y | Y | Technical | Data Warehousing | Important |
| 17 | Application should have the capability to allow TA and instructor to generate reports for displaying data of sorted data by specific column. | Y | Y | Y | Y | Y | Technical | Data Warehousing | Important |
| 18 | Application should have the capability that permits the TA ,tutor and instructor to view all available uploaded assesment report of each student and each student should be able to view the maximum score generated amongst various attempts of quizzes pertaining to each course. | Y | Y | Y | Y | Y | Functional | Management | Critical |

| | | | | | | | | | |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|-----------|------------------|-----------|
| 19 | Application should have the capability to produce numerical analysis of assessment results including mean,median,mode,5-number summary variation,range,IQR,variance and standard deviation implemented using Apache Commons math library. | Y | Y | Y | Y | Y | Technical | Data Warehousing | Important |
| 20 | Application should have the capability that permits the TA and instructor to perform graphical analysis consisting of histograms,barcharts and piechart of distribution of scores. | Y | Y | Y | Y | Y | Technical | Data Warehousing | Important |

UML Class Diagram:



Navigation Flow Diagram:



Database Tables

The following tables have currently been created:

| f15g116_rosterstats | | |
|---------------------|-------------|-----------------------|
| uin | integer | Not null, primary key |
| netid | char(7) | not null |
| lastname | varchar(50) | |
| firstname | varchar(50) | |
| role | varchar(20) | |

| f15g116_rosteradbms | | |
|---------------------|-------------|-----------------------|
| uin | integer | Not null, primary key |
| netid | char(7) | not null |
| lastname | varchar(50) | |
| firstname | varchar(50) | |
| role | varchar(20) | |

| f15g116_rosteractg | | |
|--------------------|-------------|-----------------------|
| uin | integer | Not null, primary key |
| netid | char(7) | not null |
| lastname | varchar(50) | |
| firstname | varchar(50) | |
| role | varchar(20) | |

| f15g116_course | | |
|----------------|-------------|--------------------|
| courseid | char(6) | not null unique |
| coursename | varchar(20) | |
| section | varchar(50) | |

| f15g116_enroll | | |
|-----------------------------|-------------|----------|
| uin | integer | not null |
| coursename | varchar(20) | not null |
| primary key(uin,coursename) | | |

| f15g116_assessment | | |
|--------------------|-------------|----------|
| assessmentid | char | not null |
| questionid | integer | not null |
| questiontype | varchar(20) | |

| | | |
|-----------------------------------------|------------------|--|
| questionstring | TEXT | |
| answer | TEXT | |
| answererror | double precision | |
| coursename | Varchar(20) | |
| primary key(questionid,assessmentid) | | |

| f15g116_user | | |
|--------------|-------------|-----------------------------------|
| userName | varchar(50) | |
| password | varchar(50) | |
| lastname | varchar(50) | |
| firstname | varchar(50) | |
| role | varchar(20) | |
| uin | integer | not null unique primary key |

| f15g116_result | | |
|---------------------------------------------|-------------|----------|
| uin | integer | not null |
| assessmentid | char(2) | not null |
| coursename | varchar(20) | |
| score | INTEGER | |
| primary key(uin,assessmentid,coursename) | | |

USER GUIDES

STUDENT USER GUIDE

1. Click on Take Quiz link to go to that page
 - a. Click on the select course button to get your course details
 - b. Select the course from the dropdown
 - c. Click on the select assessment button to get the assessments
 - d. Next, select the assessment/quiz which you want to take from the dropdown
 - e. Start the assessment by clicking on the Start quiz button
 - Check Your Browser Options before the Test to ensure that it is not set to disconnect after several minutes of inactivity.
 - Don't close the window of the test for any reason.
 - If something goes wrong, send an e-mail to your professor immediately, documenting the exact problem and asking how you should proceed.
 - Review All of Your Answers Before Submitting the Quiz. Make sure you have not accidentally changed your response to a question or made a typographic mistake.
 - Once you finish the test, click on submit button at the bottom
 - You will be redirected to you home page
2. To view scores, click on view score button. Click on Print Score to view scores for all your courses.
3. To logout, click on logout button

INSTRUCTOR/TA USER GUIDE

1. Click on the Roster button to upload or view Roster
 - a. Click on the select course button to get the course list
 - b. Select the course from the dropdown
 - c. Click on the browse button to select a file from the computer
 - d. Give a file label name in the text box for roster
 - e. Click on submit button to upload the roster
 - f. You can view the uploaded file data by clicking on the print roster
 - g. To reset the populated data from the page, click on the reset button
2. Click on the Assessment button to upload or view Assessment
 - a. Click on the select course button to get the course list
 - b. Select the course from the dropdown
 - c. Click on the browse button to select a file from the computer
 - d. Give a file label name in the text box for assessment
 - e. Click on submit button to upload the assessment
 - f. You can view the uploaded file data by clicking on the print roster
 - g. To reset the populated data from the page, click on the reset button
3. Click on the Courses button to view the enrolled students in a course
 - a. Click on the select course button to get the course list
 - b. Select the course from the dropdown
 - c. Click on enrolled students button to get a list of students enrolled for the course
 - d. To reset the populated data from the page, click on the reset button
4. Click on the View Student Results button to view the Student Assessment results
 - a. Click on the select course button to get the course list
 - b. Select the course from the dropdown
 - c. Click on Print result button to get the assessment grades of the students
 - d. To reset the populated data from the page, click on the reset button
5. Click on the View as a Student button to view student page for testing purposes
6. To logout, click on logout button

ADMIN USER GUIDE

1. After logging into the application, login into the database with the f15g116 group credentials.
2. Now, you are on the database page.
3. You can list tables, list columns, run queries, create and drop tables.