

Annual Class Schedule Application

Introduction:

This is a prototype for a mobile application that would allow different users to browse through different courses and schedule accordingly, the application provided a different level of actions based on the role/ status of the user. As this is a prototype, we are considering three different roles.

- Fresher Student
- Senior Student
- Administrative Staff

Based on the user role, the application would show the appropriate action items.

Design Decisions:

Below are some of the things that I considered useful while designing the application.

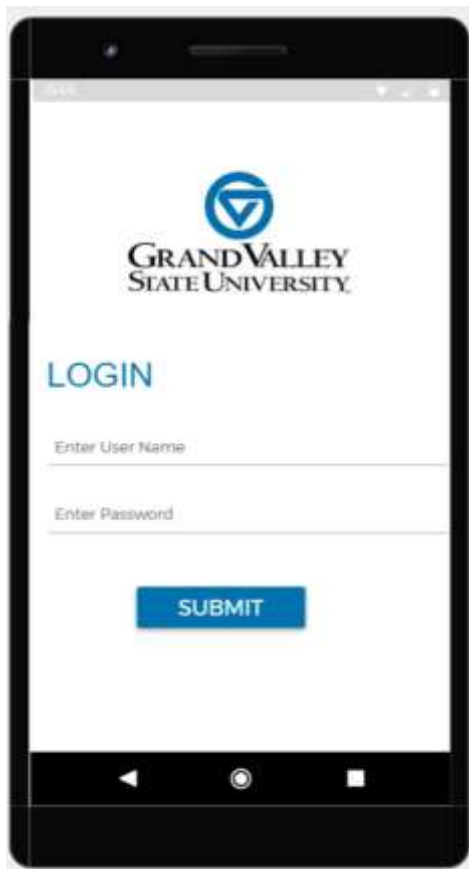
1. **Drop Down functionality:** Instead of allowing the user to enter the full text, I thought adding a drop down will be helpful for the user, as this is a mobile application the user would be having less screen size, so having a drop down would be useful in accessing the application easily.
2. **Screen Layout:** I wanted to keep the application banner same across all the screens and thought it would be useful if the application has “Back to Home” button and “Log Out” button on all screens, this way the user can easily go back to the home page or log out when needed.
3. **Navigation:** I thought it would be helpful to let the user land on the home page and then navigate from there, I thought it would be helpful if we have those options listed as button

rather than a drop down or search criteria, this way the user can clearly see the options and navigate accordingly.

4. **Fetching results:** The application has a use cases where the user is asked to select the required information from the drop down, once all the fields are selected the application retrieves the results based on the search criteria, if you notice there is no action button to retrieve the results, the application dynamically fetches the results, I thought this is really helpful because the user would not need to click another action to get the results.

Prototype:

The below is a snippet of the login page build using the prototype tool.



Similarly, the follow up screens after the login page are designed based on the user roles.

Navigation:

As the application is designed for a different set of users, it should be interactive and navigate accordingly. On a high level the below is the navigation flow.

Login Page → Home page → List out appropriate action items → Navigate to respective pages → Return to Home Page/ Logout actions.

Login page:

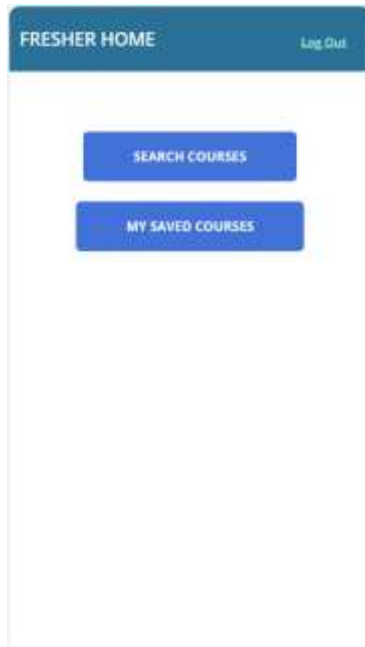
The User will be asked to enter the username and password credentials to access the application, the application would authenticate the user and takes the user to the home page.



The image shows a login interface for Grand Valley State University. At the top, there is the university's logo and name. Below this is a blue header bar with the word "LOGIN" in white. The main area has a yellow background and contains two input fields: "Enter your Email Address" with the text "fresher" and "Enter Password" with masked characters. A blue "SUBMIT" button is at the bottom.

Home page:

When the user is authenticated, the application takes to the home page where the user can perform desired actions.



Scenarios: Based on the user role, the application would allow appropriate actions.

Scenario 1: A fresher accessing the application.

Description: As a fresher, the user should be able to see all the courses offered for the semester and select desired courses, the application should allow the user to see all the courses in one glance and should allow the user to remove it from the selected list.

Flow:

In the below screenshots, the user enters the credentials and the application takes to the home page, where the user is shown with the actions items, if the user clicks on the “SEARCH COURSES”, the application takes to the search courses page where the user can select the term and major, based on the selection the application lists out all the course that is offered. The application allows the

user to select the desired course by clicking the “Add” button. Once the user is done with the selection, the user can go back to the home page and view all the saved courses by clicking “MY SAVED COURSES” button. The application takes to another screen where the user can see the selected courses and remove if needed.

The image displays three screenshots of a web application interface for Grand Valley State University.

Left Screenshot: LOGIN
The login page features the Grand Valley State University logo at the top. Below it, there is a "LOGIN" header. The main area has two input fields: "Enter your Email Address" with the text "fresher" and "Enter Password" with masked characters "*****". A blue "SUBMIT" button is at the bottom.

Middle Screenshot: FRESHER HOME
The "FRESHER HOME" page has a blue header with the title and a "Log Out" link. The main content area contains two blue buttons: "SEARCH COURSES" and "MY SAVED COURSES".

Right Screenshot: SEARCH COURSES
The "SEARCH COURSES" page has a blue header with the title and a "Log Out" link. A "Back to Home" link is at the top. Below it, there are two dropdown menus: "Select Term" (showing "Fall-2019") and "Select Major" (showing "Choose option"). The "Select Major" dropdown is open, displaying a list of majors: "Choose option", "Computer Information Systems", "International Relations", "Health Information Management", "Women and Gender Studies", "Management and Information Systems", and "Data Science and Analytics".

SEARCH COURSES

Log Out

Back to Home

Select Term

Fall 2019

Select Major

Computer Information Systems

Courses Available

Course	
CIS-611 Introduction to software engineering-- James - M -- 1:30pm-4:00pm	Add
CIS-623 Graphical user interface design - T -- 12:30pm-1:30pm	Add
CIS 660 - Information Management and Science- Tao - W -- 11:00am-12:30pm	Add

MY SAVED COURSES

Log Out

Back to Home

Course	
CIS-611 Introduction to software engineering-- James - M -- 1:30pm-4:00pm	Remove
CIS-623 Graphical user interface design - T -- 12:30pm-1:30pm	Remove

Scenario 2: A Senior accessing the application.

Description: As a Senior, the user should be able to search, select all the courses offered for the semester and should be able to see all the courses that the user currently registered.

Flow: Once the user is authenticated the application takes to the home page where the user can select the options and navigate accordingly.



Grand Valley State University

LOGIN

Enter your Email Address

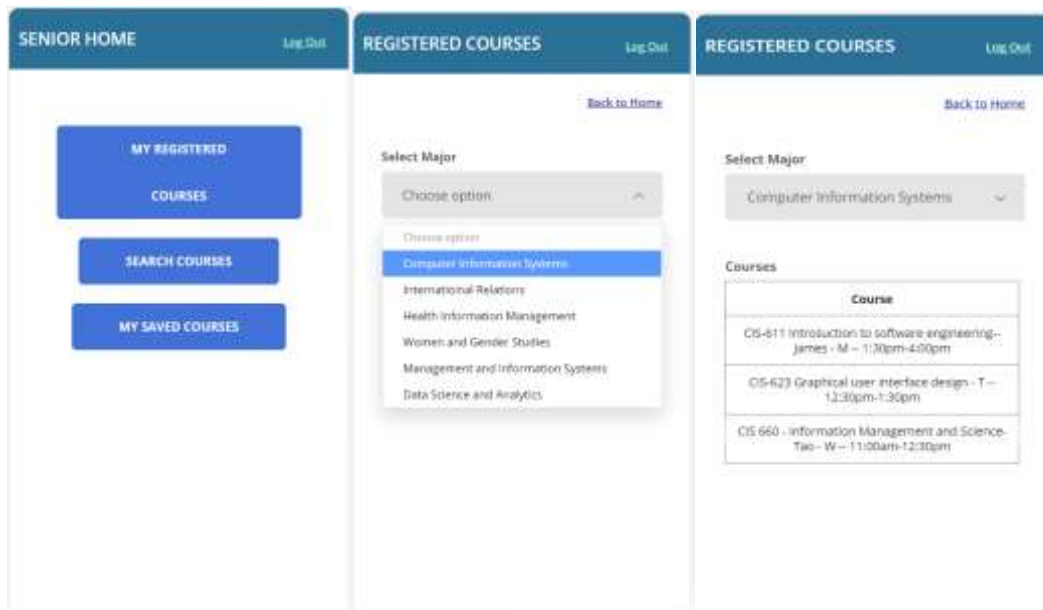
ENTER

Enter Password

ENTER

SUBMIT

When the user clicks on the first option, the application takes to the next page where the user can select the major to see all the courses registered.



The first screenshot shows the 'SENIOR HOME' page with a 'Log Out' link and three main buttons: 'MY REGISTERED COURSES', 'SEARCH COURSES', and 'MY SAVED COURSES'.

The second screenshot shows the 'REGISTERED COURSES' page with a 'Log Out' link and a 'Back to Home' link. It features a 'Select Major' dropdown menu with the following options: 'Choose option', 'Choose option', 'Computer Information Systems', 'International Relations', 'Health Information Management', 'Women and Gender Studies', 'Management and Information Systems', and 'Data Science and Analytics'.

The third screenshot shows the 'REGISTERED COURSES' page with a 'Log Out' link and a 'Back to Home' link. It features a 'Select Major' dropdown menu with the following options: 'Choose option', 'Choose option', 'Computer Information Systems', 'International Relations', 'Health Information Management', 'Women and Gender Studies', 'Management and Information Systems', and 'Data Science and Analytics'. Below the dropdown is a table of courses:

Course
CIS-611 Introduction to software engineering-- James - M - 1:30pm-4:00pm
CIS-623 Graphical user interface design - T - 12:30pm-1:30pm
CIS 660 - Information Management and Science- Tao - W - 11:00am-12:30pm

If the user chose to search all the courses, then the application takes to the screen where the user can search the courses based on the term and major, the application allows the user to add select the desired course by using the "Add" button functionality.

SEARCH COURSES

Log Out

[Back to Home](#)

Select Term

Choose option

Choose option

Fall-2019

Winter-2020

Winter-2020

Courses Available

SEARCH COURSES

Log Out

[Back to Home](#)

Select Term

Winter-2020

Select Major

Computer Information Systems

Courses Available

Course	
CIS-611 Introduction to software engineering- James - M – 1:30pm-4:00pm	Add
CIS-623 Graphical user interface design - T – 12:30pm-1:30pm	Add
CIS 660 - Information Management and Science- Tao - W – 11:00am-12:30pm	Add

The application also allows the user to see all the selected courses in one screen, the application allows the user to remove any course from the list by clicking on “Remove” button.

MY SAVED COURSES

Log Out

[Back to Home](#)

Course	
CIS-611 Introduction to software engineering- James - M – 1:30pm-4:00pm	Remove
CIS-623 Graphical user interface design - T – 12:30pm-1:30pm	Remove
CIS 660 - Information Management and Science- Tao - W – 11:00am-12:30pm	Remove

Scenario 3: An Administrative staff accessing the application.

Description: As an administrative staff, the user should be able to do search the facility, courses or instructor, the application should show the relevant options for the user to use the application.

Flow: The user is asked to enter the credentials to access the application, once the user is authenticated the application takes to the home page where the user could select one of the listed options to perform actions or navigate through the application.



The image shows a login form for Grand Valley State University. At the top, there is the university's logo and name. Below this is a blue header with the word "LOGIN" in white. The main form area has a yellow background. It contains two input fields: "Enter your Email Address" with the text "admin" entered, and "Enter Password" with masked characters "*****". A blue "SUBMIT" button is at the bottom.

If the user selects the first option, then the application takes to the next screen.

ADMIN HOME
Log Out

SEARCH BY FACILITY

SEARCH BY INSTRUCTOR

SEARCH COURSES

SEARCH COURSES
Log Out

[Back to Home](#)

Select Facility

Facility 1

Select Building

Choose option

Choose option

Block A

Block B

Courses

SEARCH COURSES
Log Out

[Back to Home](#)

Select Facility

Facility 1

Select Building

Block B

Select Room

Room 1

Courses

If the user selects the second option, then the application takes to the next screen (s), where he can select the instructor's name from the drop down.

SEARCH BY INSTRUCTOR
Log Out

[Back to Home](#)

Select Instructor

Choose option

Choose option

Kim Felmingham

Chris Whitty

John Nash

Courses

SEARCH BY INSTRUCTOR
Log Out

[Back to Home](#)

Select Instructor

Kim Felmingham

Courses

Similarly, if the user selects the third option then the application takes to the next screen to search courses based on term and major.

The image displays two side-by-side screenshots of a web application titled "SEARCH COURSES". Both screenshots have a blue header with the title and a "Log Out" link. A "Back to Home" link is located below the header in both.

Left Screenshot:

- Select Term:** A dropdown menu showing "Fall-2019".
- Select Major:** A dropdown menu with "Choose option" selected. The dropdown list is open, showing the following options: "Choose option", "Computer Information Systems" (highlighted in blue), "International Relations", "Health Information Management", "Women and Gender Studies", "Management and Information Systems", and "Data Science and Analytics".

Right Screenshot:

- Select Term:** A dropdown menu showing "Fall-2019".
- Select Major:** A dropdown menu showing "Computer Information Systems".
- Courses Available:** A table listing available courses.

Course
CIS-611 Introduction to software engineering— James - M - 1:30pm-4:00pm
CIS-623 Graphical user interface design - T - 12:30pm-1:30pm
CIS 660 - Information Management and Science- Tao - W - 11:00am-12:30pm