

ADVANCED SOFTWARE ENGINEERING
ELABORATION PHASE 1
GROUP 1

TABLE OF CONTENTS

1. Introduction
2. List of features and sub tasks
3. Requirement Analysis
4. Configuration and Implementation
5. Testing
6. Documentation
7. Project Management Tool

1. INTRODUCTION

Student networking application is a web application that allows the students to conduct virtual meetups with peer students of same university. Moreover, it displays the information about the events and activities being conducted in the university. This application helps the students meet up with other students, exchange their views and ideas and enhance their skills.

2. LIST OF FEATURES AND SUB TASKS

1. Login feature
 - Create admin interface
 - Create login page for students
 - Create registration page for students
 - Create database tables for login feature
2. Events Page
 - Create database for events
 - Display the events
 - Add, update and delete event operations
 - Search for events
 - Order by event attributes
3. Discussion Board
 - Create, delete table
 - Create host and co-host and general participant roles
 - Assign roles and permissions

- Invite to join a table
- Join a table and exit table
- Audio and its mute option
- Video and its mute option
- Chat option
- Polling feature
- Cron job to delete unattended tables

4. Report

- Create Form to report issues
- Report tracking
- Feedback

5. Policies

- Privacy and Security Policy
- Terms and Conditions

3. REQUIREMENT ANALYSIS

Hardware Requirements (minimum):

- Computer: 4GHz, quad core processor
- Hard disk: 1GB
- RAM: 4GB

Software Requirements:

- Node.js
- HTML5
- CSS3
- JavaScript
- NPM
- NPM packages
- IBM Cloud Account
- IBM Client

4. CONFIGURATION AND IMPLEMENTATION

Initial Installation Steps

Install the git and npm in the local environment

Step to clone the code

Clone the project using command prompt
git clone https://gitlab.cs.uwindsor.ca/ase_team1/student-networking-application.git
cd student-networking-application
Run npm install
Run npm update

Add Environment Variables

Create a file name '.env' in the same directory
copy .env-sample content to .env file
Edit the credentials with your database credentials

Project Dependencies

Run npm install or yarn to install all the dependency

Start Project

Run node app.js to start the project

Tests

Run npm test to run the unit test cases for the features.

Run the Project locally

Run npm start
Navigate to <http://localhost:3000/> in the browser.

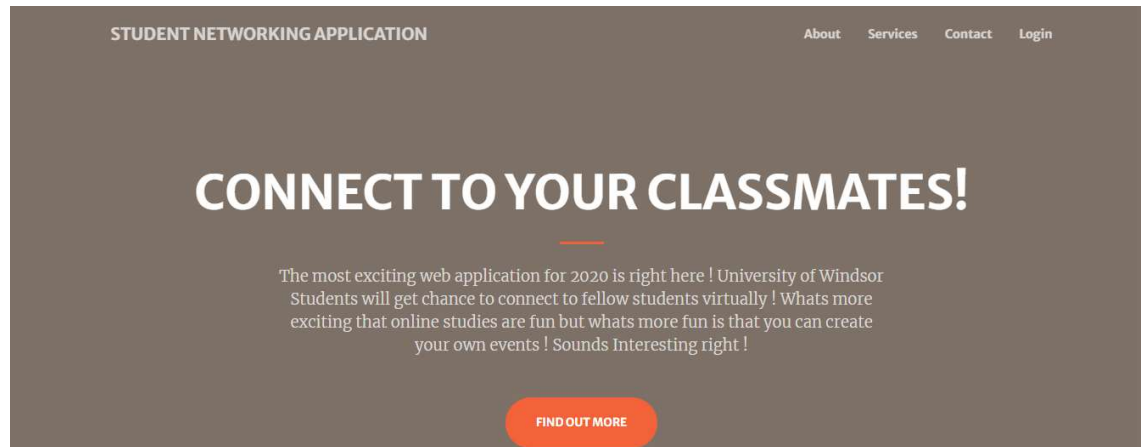
IMPLEMENTATION

In this elaboration phase, we have started working on

1. Login feature
2. Display Events feature
3. General Web Pages

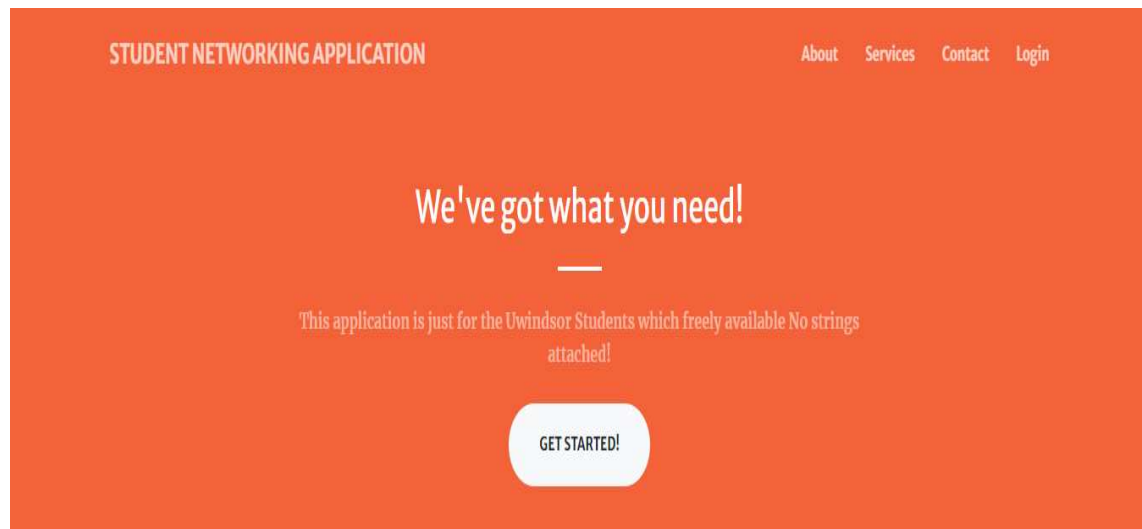
WEBSITE PAGES

Home Page



This Home page is displayed when the website link is opened in the browser. It briefly introduces our application.

About Page



This is the about page which has the link to explore our application.

Service Page

At Your Service



Events

Various events are happening virtually.



For U Windsor Students

You can signup using your school email and make friends



Get Connected

You can form groups and create your own event where your friends can attend ! Sounds Exciting !



Made with Love


We totally get it whats the pain studying online and meeting no friends ! This application is specially made with love for University of Windsor's Students

This is the service page which is used to get information and access all the services provided by the application.


Contact Page

Any Questions ?

Feel free to mail us if you have any questions



+1 (555) 123-4567



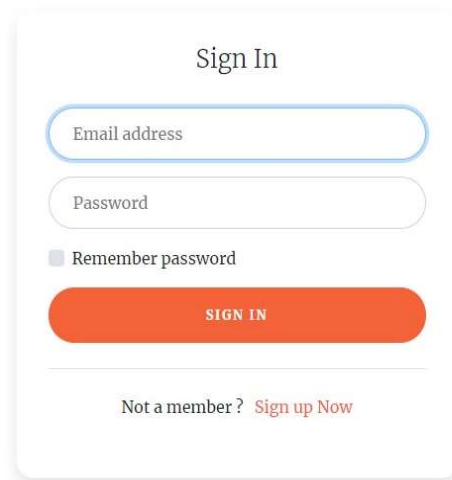
contact@yourwebsite.com

Help us Improve our Website [Give your Feedback!](#)

This page contains the contact information for the website service desk.

LOGIN FEATURE PAGES

Sign in Page



A sign-in form titled "Sign In" with a light gray background and rounded corners. It features two input fields: "Email address" and "Password". Below the password field is a checkbox labeled "Remember password". A prominent orange "SIGN IN" button is centered below the inputs. At the bottom, a link "Not a member ? Sign up Now" is displayed in a smaller, reddish font.

Sign In

Email address

Password

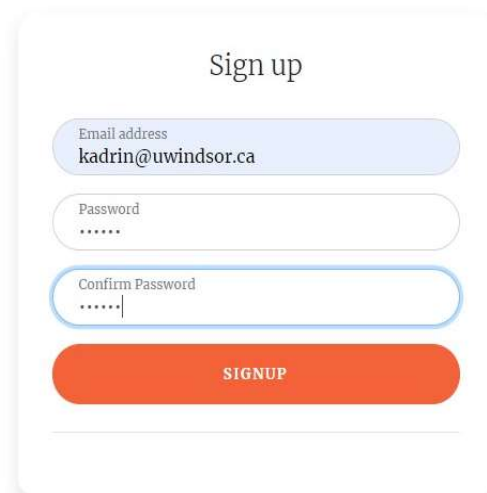
☐ Remember password

SIGN IN

Not a member ? [Sign up Now](#)

This is the login page for students to use the virtual rooms for meetups and access events information.

Sign Up Page



A sign-up form titled "Sign up" with a light gray background and rounded corners. It includes three input fields: "Email address" (pre-filled with "kadrin@uwindsor.ca"), "Password", and "Confirm Password". The password fields are masked with dots. An orange "SIGNUP" button is centered below the inputs. A horizontal line is at the bottom.

Sign up

Email address
kadrin@uwindsor.ca

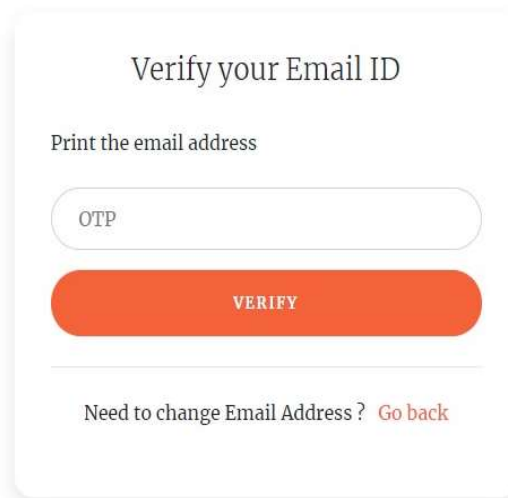
Password
.....

Confirm Password
.....

SIGNUP

This signup page helps students to sign up for the website and access its services.

Verify Email ID Page



Verify your Email ID

Print the email address

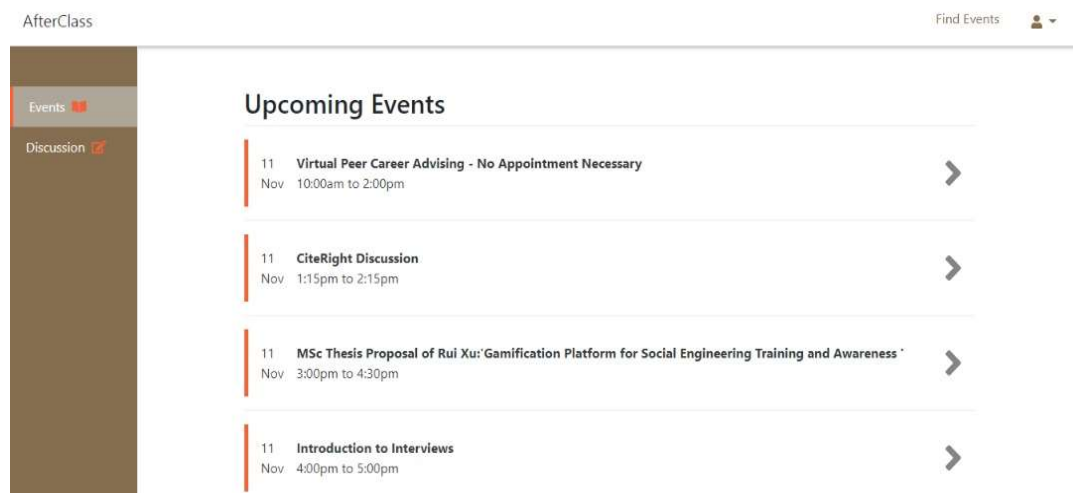
OTP

VERIFY

Need to change Email Address ? [Go back](#)

This verify email id page helps to verify whether the user is a valid student or not with the use of onetime password.

Display Events Feature



AfterClass Find Events

Events

Discussion

Upcoming Events

11 Nov	Virtual Peer Career Advising - No Appointment Necessary	>
11 Nov	CiteRight Discussion	>
11 Nov	MSc Thesis Proposal of Rui Xu: Gamification Platform for Social Engineering Training and Awareness	>
11 Nov	Introduction to Interviews	>

This events page displays all the upcoming events and their detailed information.

5. TESTING

In student networking application, we have used the test-driven development methodology for implementing the application. The application is developed using

node.js and we used mocha, chai and chai-http packages for writing the unit test cases.

The unit test cases are stored in a separate folder called tests. The application developed till now has test cases for the website normal pages, login feature and display events feature.

Output for the unit test cases

```
> mocha --timeout 10000

server start at http://localhost:3000

Events
  GET /events
    ✓ it should GET all events
http://127.0.0.1:3000
    ✓ it should return the events page

Website Index Page
  GET /
    ✓ it should GET index page

Login feature
  GET signup and sign pages
    ✓ it should GET sign up page
  {}
    ✓ it should return the signin page

5 passing (191ms)
```

6. DOCUMENTATION

The project is maintained using Gitlab. The commits regarding the display events feature and login feature are made in the Gitlab repository.

The link is https://gitlab.cs.uwindsor.ca/ase_team1/student-networking-application/

The documentation for the project can be seen in https://gitlab.cs.uwindsor.ca/ase_team1/student-networking-application/-/wikis

Added project usage details are also mentioned in readme.md file of Gitlab repository.

7. PROJECT MANAGEMENT TOOL

The project management tool used for this project is Redmine. The Redmine tool is used for managing the teamwork and to list the tasks and assign them to each member. Moreover, the estimated time for the tasks is also added.

Software Project Management URL:

<https://redmine.cs.uwindsor.ca/projects/ase-team1>

Note: The upcoming phase tasks are created but not yet assigned. As we need to decide on which task can be done by whom.

Student Networking Application - Issues

#	Status	Priority	Subject	Assignee	Updated	Estimated time
3819	Closed	Normal	Develop the Events Display Feature	Adaobi Aniuchi	11/11/2020 02:36 PM	20.0
3770	Closed	High	Setup Version Control System for the application	Mounika Vannawada	11/06/2020 01:11 PM	0.25
3769	Closed	Immediate	Setup for both front and backend technologies	Mounika Vannawada	11/06/2020 01:09 PM	4.0
3768	Closed	High	Setup Database for the application	Mounika Vannawada	11/06/2020 01:08 PM	2.0
3767	Closed	Immediate	Initial Setup for the application	Mounika Vannawada	11/06/2020 01:09 PM	6.25
3766	Closed	Normal	Design API endpoints for Report Issues Feature	Adaobi Aniuchi	11/06/2020 01:14 PM	0.5
3765	Closed	Normal	Design API endpoints for Discussion Rooms feature	Adaobi Aniuchi	11/06/2020 01:14 PM	1.0
3764	Closed	Normal	Design API endpoints for List Events page	Adaobi Aniuchi	11/06/2020 01:13 PM	0.5
3763	Closed	High	Design API endpoints for Login feature	Adaobi Aniuchi	11/06/2020 01:12 PM	0.5
3762	Closed	Normal	Design tables for Report Issues feature	Nizar Juned Kadri	11/11/2020 12:19 PM	0.5
3761	Closed	Normal	Design tables for Discussion rooms feature	Nizar Juned Kadri	11/11/2020 12:19 PM	1.0
3760	Closed	Normal	Design tables for List Events feature	Nizar Juned Kadri	11/11/2020 12:18 PM	0.5
3759	Closed	High	Design database tables for Login feature	Nizar Juned Kadri	11/11/2020 12:19 PM	0.5
3758	Closed	Immediate	Design UI template for error pages	Hesha Sheth	11/11/2020 12:23 PM	0.5
3755	Closed	Normal	Design template for Event page	Hesha Sheth	11/11/2020 12:22 PM	0.5
3754	Closed	Immediate	Design templates for login and signup pages	Hesha Sheth	11/11/2020 12:25 PM	6.0
3753	Closed	Normal	Design logo for the application	Hesha Sheth	11/09/2020 12:28 PM	0.5
3752	Closed	High	API design for the application	Adaobi Aniuchi	11/06/2020 01:14 PM	2.5
3751	Closed	Normal	Policies for the application	Adaobi Aniuchi	11/06/2020 12:56 PM	2.0
3750	Closed	High	Database design for the application	Nizar Juned Kadri	11/11/2020 12:21 PM	2.5

Student Networking Application - Issues

#	Status	Priority	Subject	Assignee	Updated	Estimated time
3882	New	Normal	Cron job to delete unattended tables		11/11/2020 12:10 PM	3.0
3881	New	Normal	Chat feature for the discussion board tables		11/11/2020 12:15 PM	4.0
3880	New	Normal	Video feature for the discussion board table		11/11/2020 12:09 PM	8.0
3879	New	Normal	Audio feature for the discussion board tables		11/11/2020 12:09 PM	6.0
3878	New	Normal	Join and Exit features		11/11/2020 12:08 PM	3.0
3877	New	Normal	Create roles and assign responsibilities		11/11/2020 12:16 PM	3.0
3876	New	Normal	CRUD operations for discussion tables		11/11/2020 12:06 PM	5.0
3875	New	Normal	Discussion Board for the application		11/11/2020 12:16 PM	32.0
3874	New	Normal	Feedback pages		11/11/2020 12:04 PM	3.0
3873	New	Normal	Report tracking pages		11/11/2020 12:03 PM	4.0
3872	New	Normal	Create Form to report issues		11/11/2020 12:03 PM	4.0
3871	New	Normal	Report feature for the application		11/11/2020 12:04 PM	11.0
3822	New	Normal	Develop the registration feature		11/09/2020 12:55 PM	2.0
3821	New	High	Develop the login related pages		11/09/2020 12:54 PM	2.0
3820	New	Normal	Develop the admin interface		11/09/2020 12:52 PM	4.0
3818	In Progress	High	Develop the Login feature	Nizar Juned Kadri	11/11/2020 12:20 PM	8.0
3806	In Progress	Normal	Create Database tables for the application	Mounika Vannawada	11/11/2020 12:16 PM	2.0
3757	Feedback	Normal	Design wireframes for report issues feature	Hesha Sheth	11/06/2020 06:22 PM	0.5
3756	In Progress	Normal	Design template for discussion rooms	Hesha Sheth	11/06/2020 01:18 PM	1.5
3749	In Progress	Immediate	Design wireframes for the application	Hesha Sheth	11/11/2020 12:23 PM	3.5