



UTA COMMUNITY

College is hard. Friends make college fun. A community makes college easier



DECEMBER 7, 2020

TEAM NUMBER: 7 FINAL INCREMENT

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Unified Modeling Language (UML)

Revision	Date	Originator	Reason for Change	High level description of change
1.0	9/25/2020	Team 7	Initial Draft	Inconsistency with the original draft of UTA Community2.
2.0	10/1/2020	Team 7	Second Drat	On UTA community pdf functionality. Our group originally had User information as number 2 and we have realized that is a smaller version of Database so we are changing it to login and registration

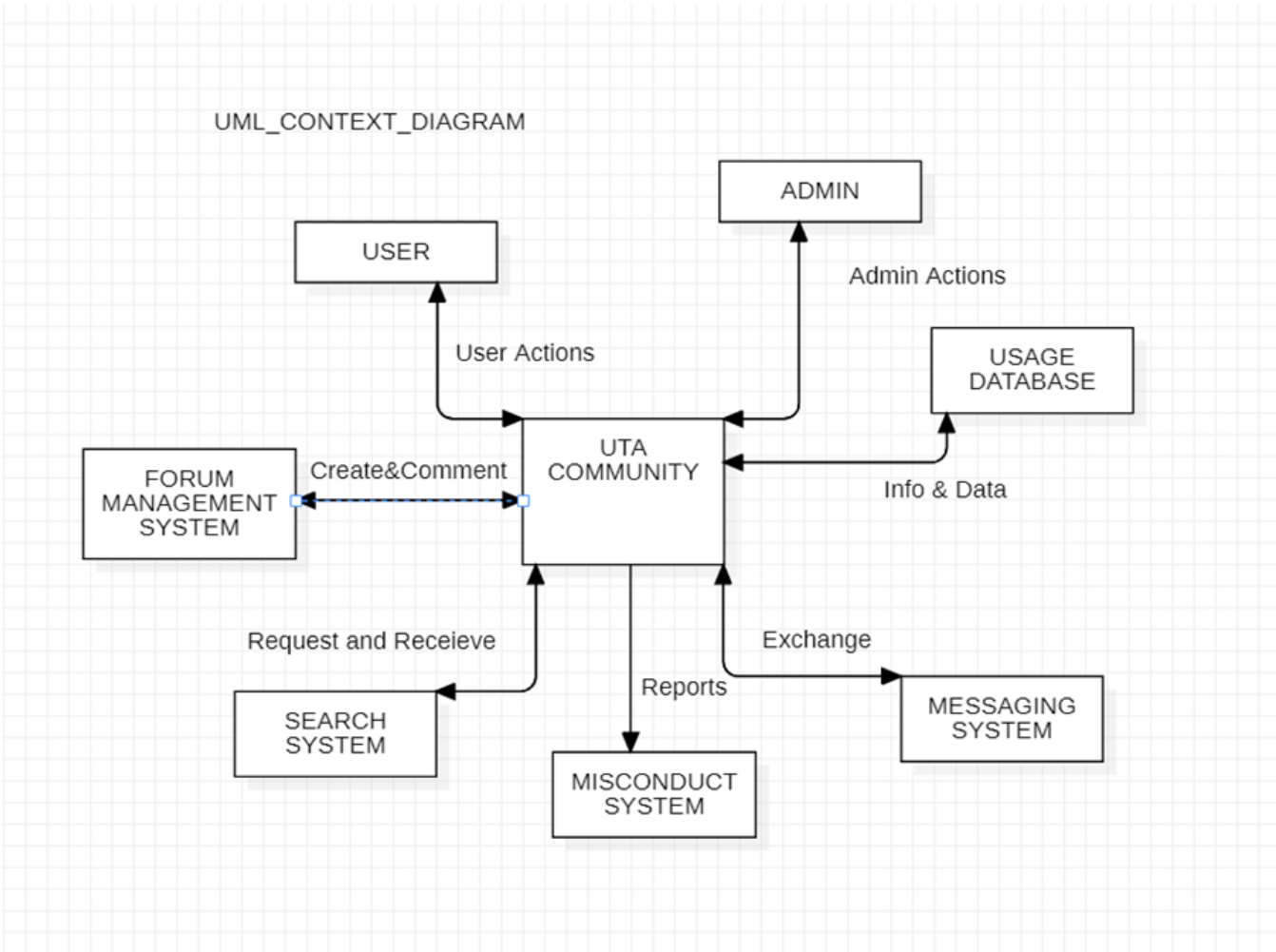
Introduction and Project Overview

UTA community is an android app, that creates a community atmosphere for students virtually by providing information on various forums such as: General Campus Information, Book Giveaways, Sport events, Traffic News, Club information, Campus Attractions, Entertainment etc. This app is exclusively for the members of UTA to help them socially, save time and effort.

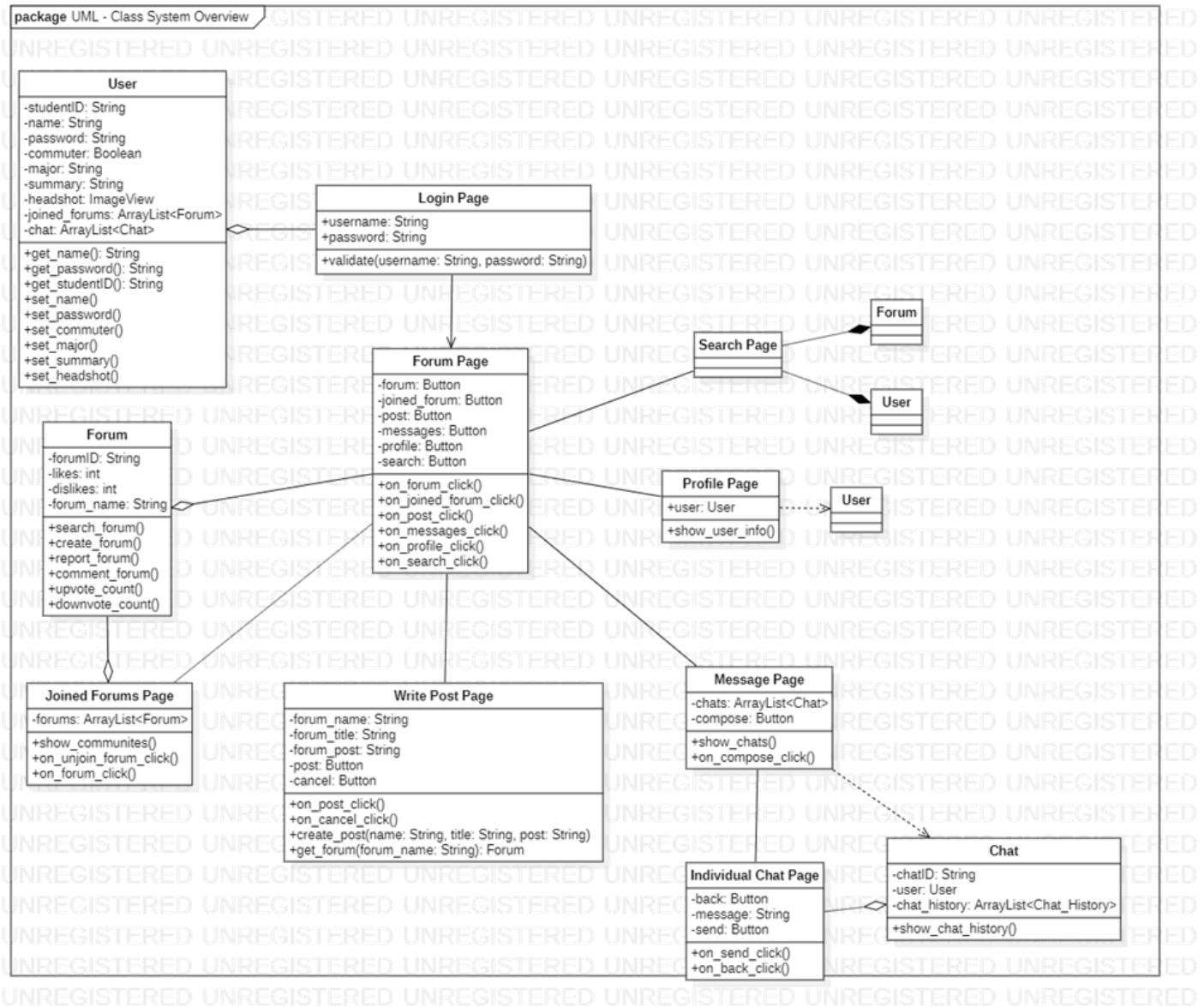
For starters, you need to download this app in your android phone and then you can register by using your basic information such as name, student id, major etc. Registered users can login easily by using their user id and password. The app will open to the news feeds of various forums provided by their admins. In this app you can create your own group or join groups under the provided forums. Through this you can write post, read what other members has written as well as comment on the posts. This app allows you to search for the people and view their profile and send messages directly to them. Through the regular posting by the admins as well as users on various information, issues, solutions etc. members will be able to adjust their scheduled time appropriately. For example: If someone write a post on Traffic News regarding road blockage or accidents, one can take an alternative route to their destination rather than getting stuck in traffic. Similarly, users will be able to post on various matters like sports events, donation programs, major events, awareness programs etc. This app will work as information center and virtual guide to the members.

In case of misconduct, the reported posts and messages will first be thoroughly examined by the administration for offensive words, abuses, criminal activities like bullying, blackmailing, education system misconduct etc. If the report is found guilty, there will be several consequences either of temporary or permanent ban.

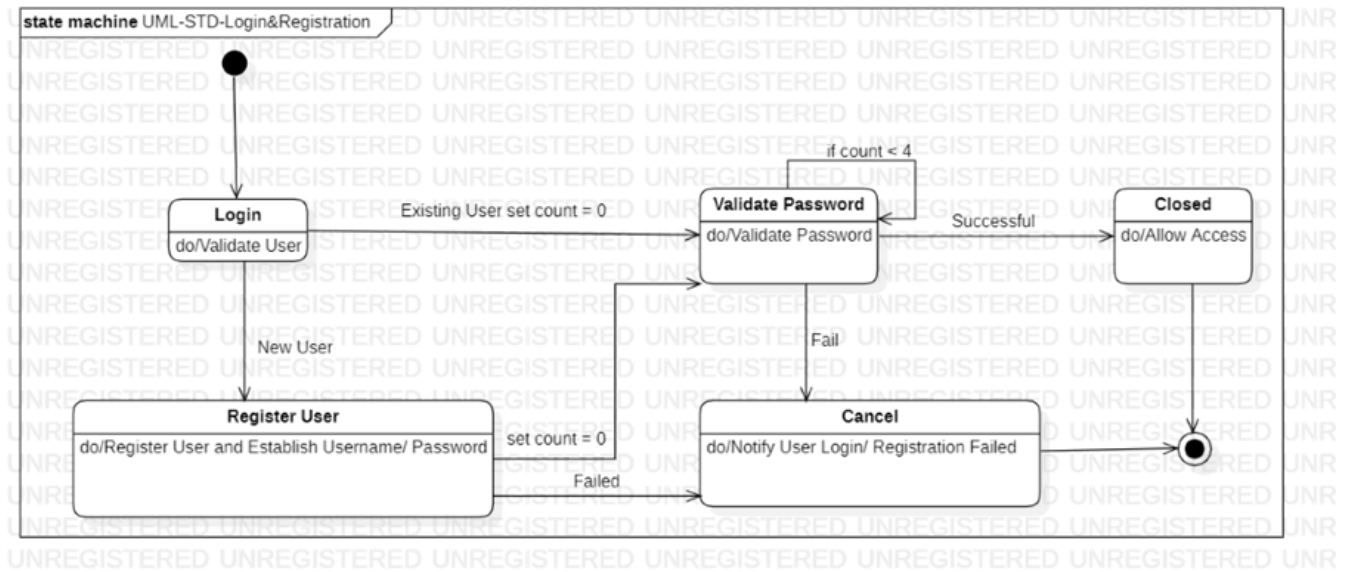
Project Context Diagram



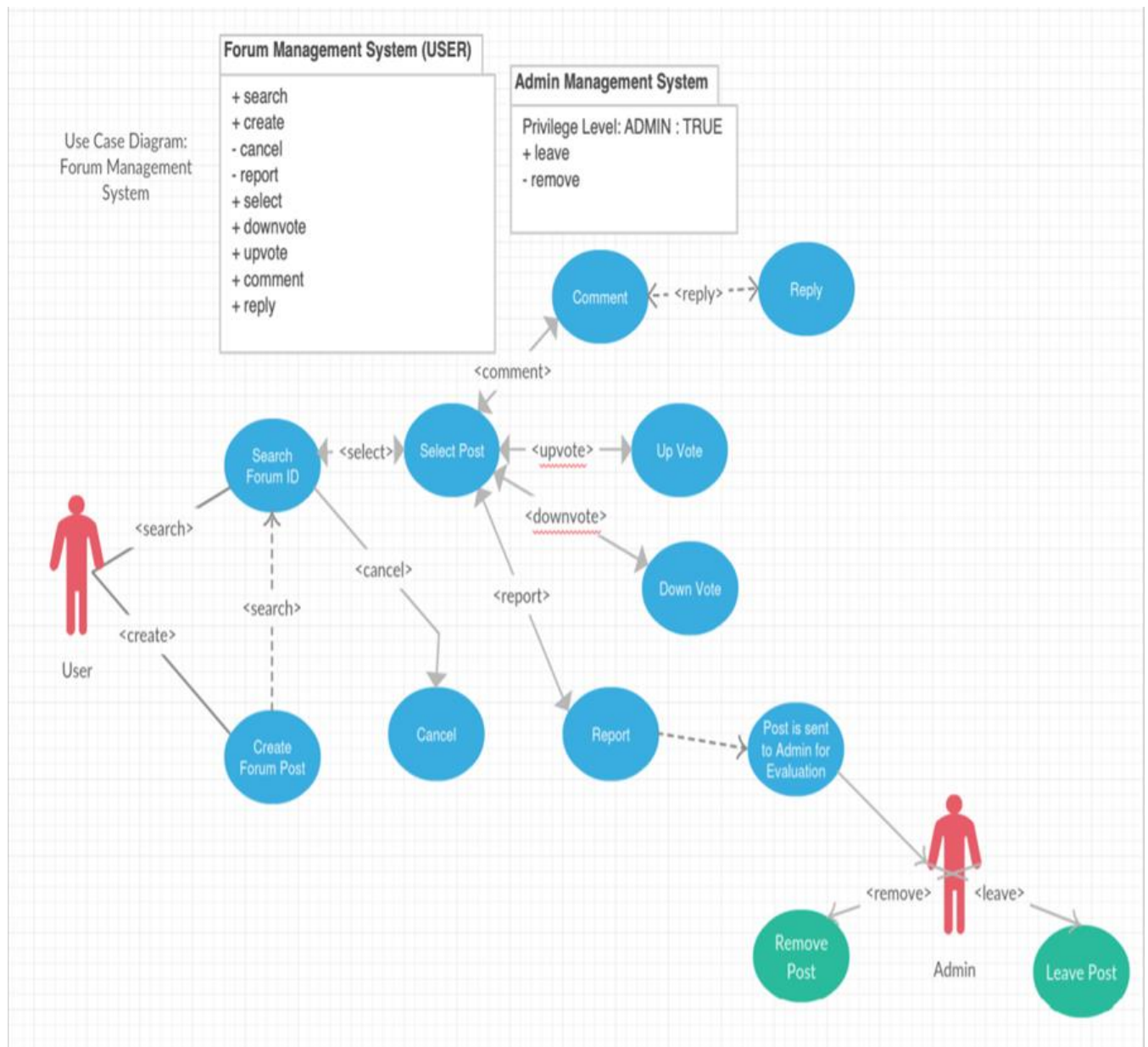
UML Diagram: System Overview



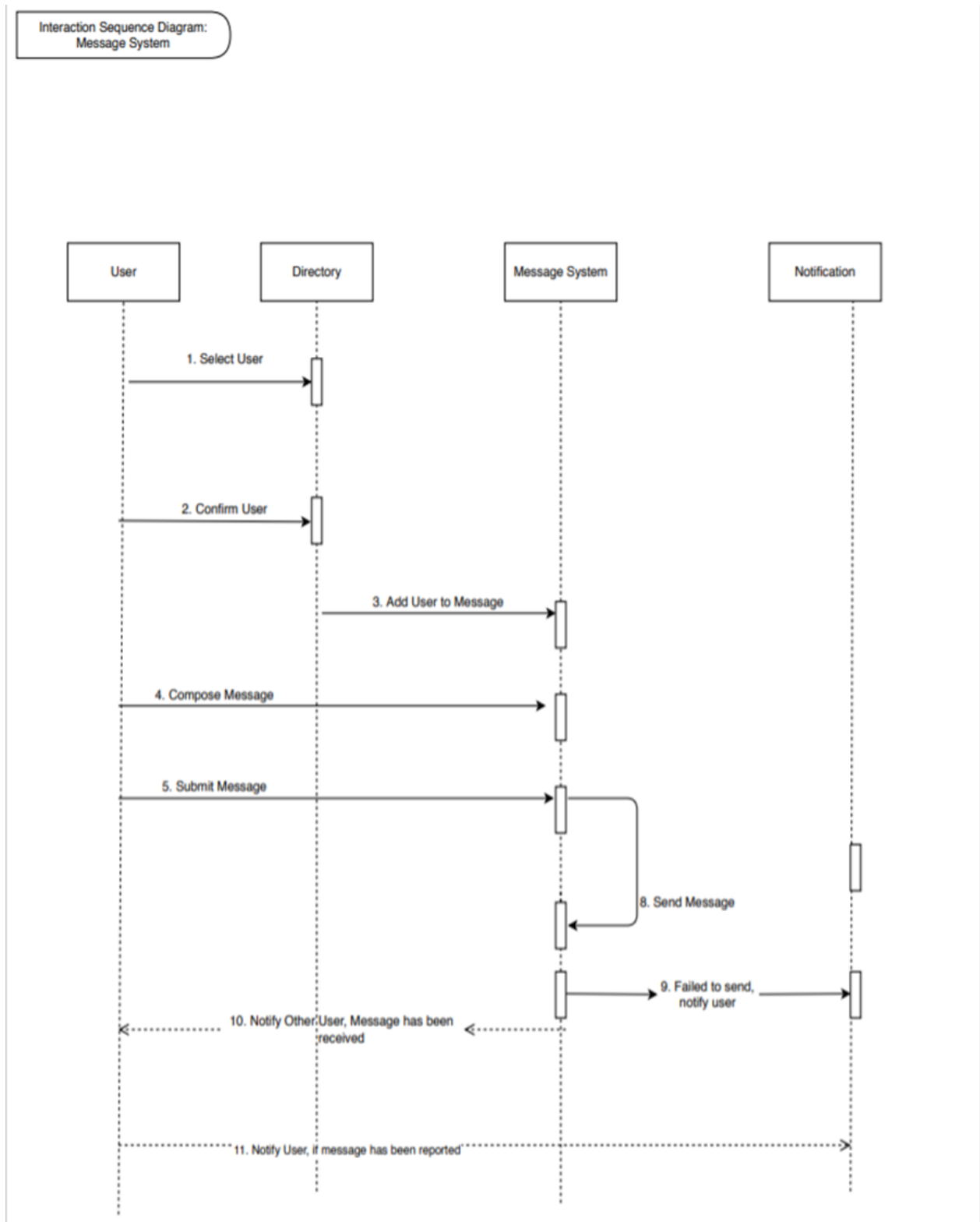
UML Diagram: Login and Registration



UML Diagram: Forum Management Diagram

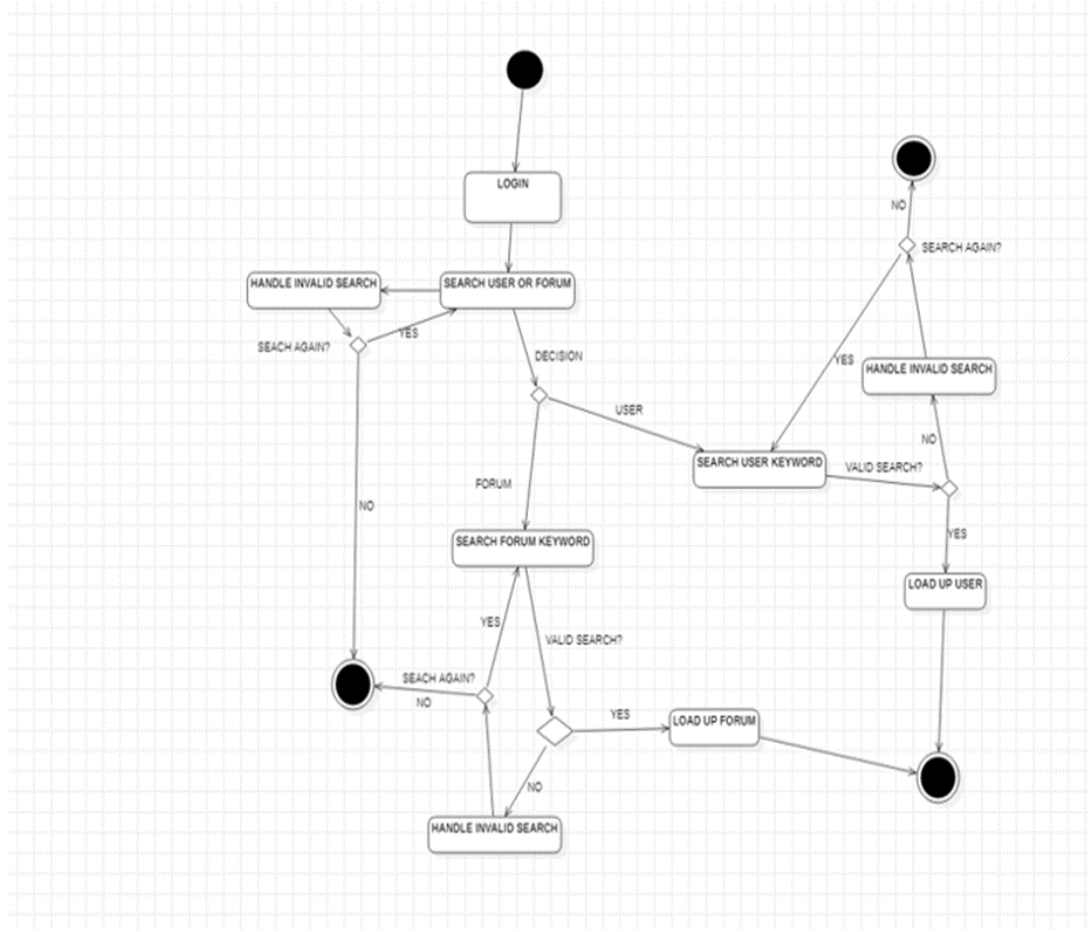


UML Diagram: Message System

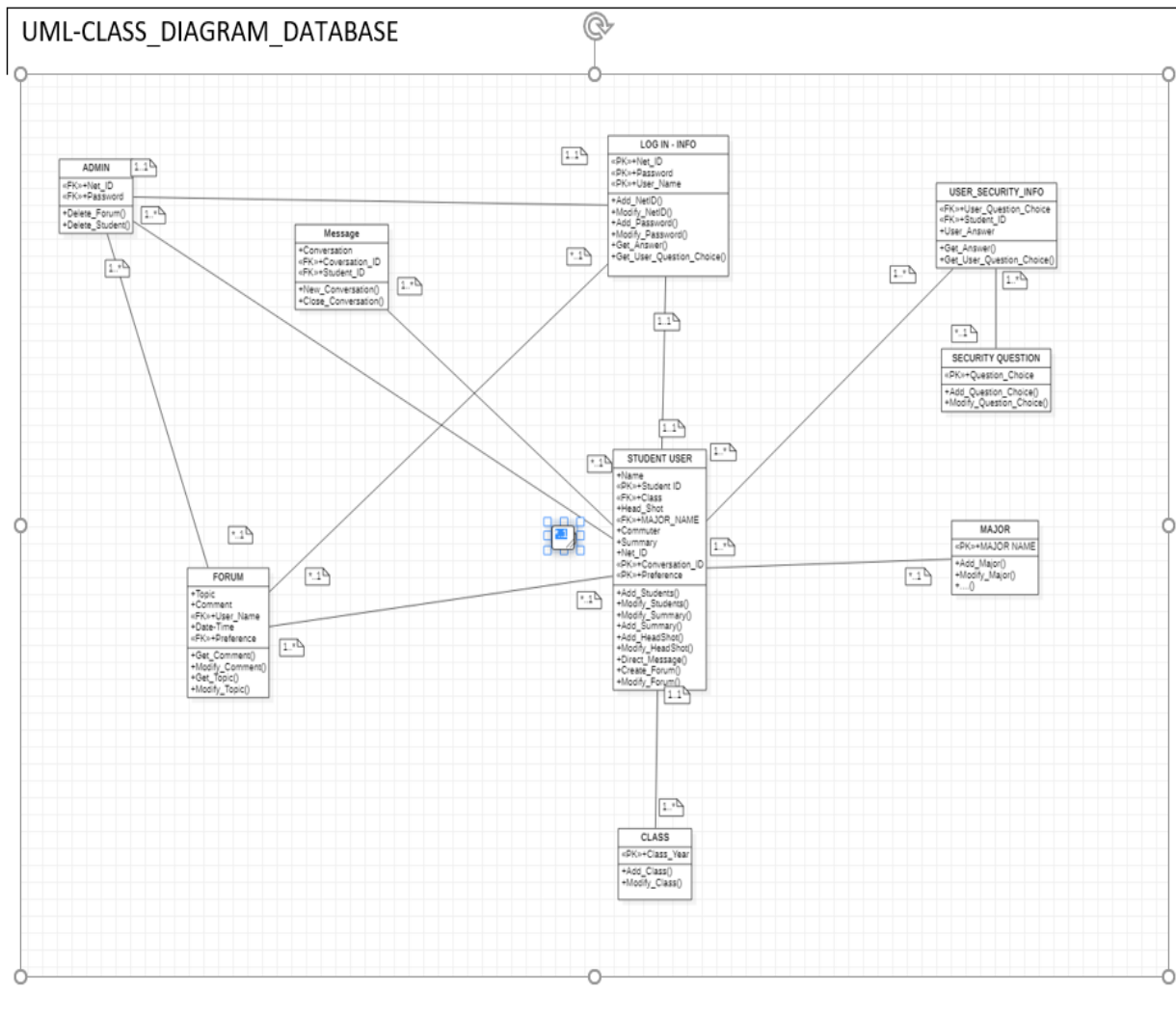


UML Diagram: Search System

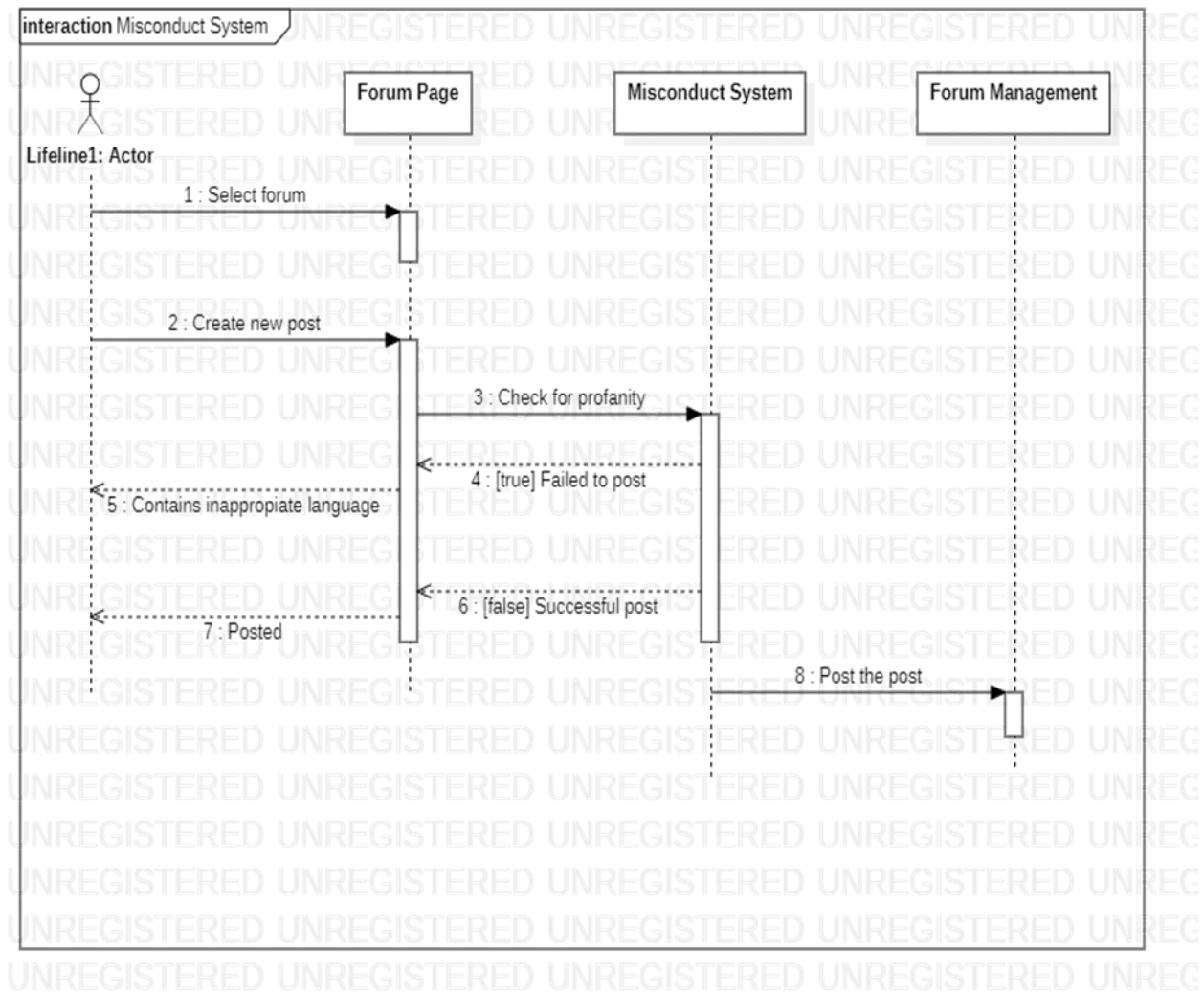
UML_ACTIVITY_SEARCH_DIAGRAM



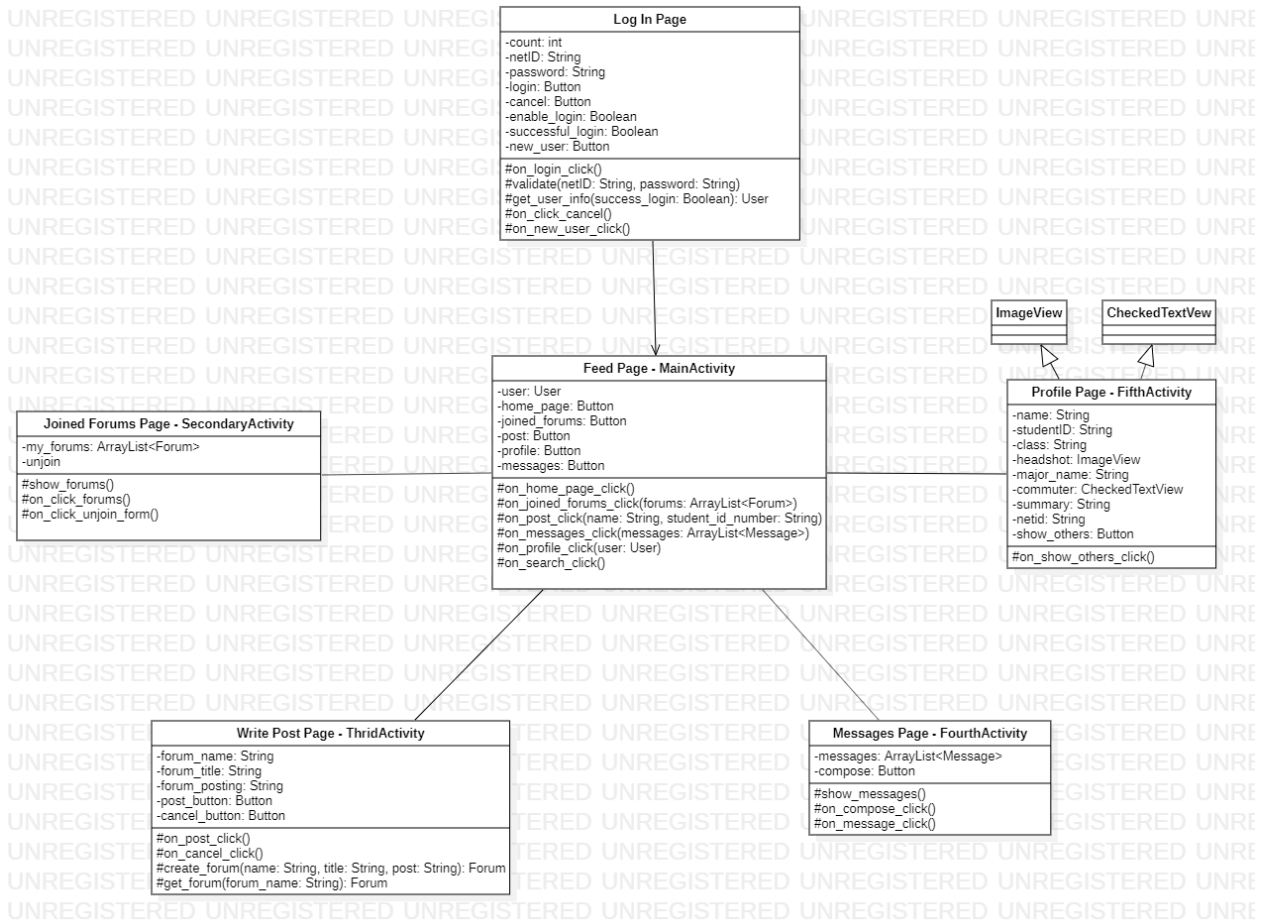
UML Diagram: Database System



UML Diagram: Misconduct System



UML Diagram: Graphical User Interface (GUI)



System Requirements Analysis (SRA)

Version Number	Date	Originator	Reason for Change	High level description for change
1.0	10/29/2020	Team 7	No change made	N/A

Introduction and Project Overview

- UTA COMMUNITY is an android app, that creates a community atmosphere for students virtually by providing information on various forums such as: General Campus Information, Book Giveaways, Sport events, Traffic News, Club information, Campus Attractions, Entertainment etc. This app is exclusively for the members of UTA to help them socially, save time and effort.
- For starters, you need to download this app on your android phone and then you can register by using your basic information such as name, student id, major etc. Registered users can login easily by using their user id and password. The app will open to the news feeds of various forums which have already been created or the user can create a forum with a topic of choice. In this app users can join any existing forums. Through this user can write posts on that forum, read what other members have written as well as comment on the posts. This app allows you to search for the people and view their profile and send messages directly to them. Through the regular posting by the admins as well as users on various information, issues, solutions etc. members will be able to attain new valuable information. For example: If someone writes a post on Traffic News regarding road blockage or accidents, one can take an alternative route to their destination rather than getting stuck in traffic. Similarly, users will be able to post on various matters like organization, sports events, donation programs, major events, awareness programs etc. This app will work as an information center and virtual guide to the members.
- In case of misconduct, the reported posts and messages will first be thoroughly examined by the administration for offensive words, abuses, criminal activities like bullying, blackmailing, education system misconduct etc. If the report is found guilty, there will be several consequences either of temporary or permanent ban.

Objectives: Business

Objective 1: *Registration System*

Will capture the following personal information:

Last name, middle name {optional}, first name
Student ID
Commuter
Major
Picture (Face)
Phone number
E-mail
Address
User Id & Password
Summary

Objective 2: *Forum Management System*

This component will enable users to interact within a variety of communities and be able to perform such activities as:

- *Forum Post:*
 - Users will be able to post their perspectives and questions within a community
- *Comment:*
 - Other users will be able to comment their answers and further questions on a topic
- *Upvote:*
 - Users can show their support by upvoting posts to receive more input on a post
- *Report:*
 - User can report posts that they deem inappropriate

Objective 3: *Message System*

This component will allow for users to privately message one another and communicate. This will not include group messaging to promote user engagement within the forum community.

Objective 4: Search System

This System will help the user to search up other user and check out their profile or search up the forums that they are interested in to check out the information provides on that forum.

Objective 5: Database

This component will keep track and save all the information as well as the site data. Handling permission level such as Admin has the power to delete or banned user. This includes:

- The Registration data info
 - From both User and Admin from Registration.
- The Messages Data
 - Conversations between Users
- The Forum Data
 - What was posted on the forums, also all the user actions such as upvote
- Security Question
 - List of security questions helping users retrieve their accounts.
- User/Admin Security Info
 - The security questions and answer from the User/Admin selections

Objective 6: The system will have a friendly user interface that can easily be switched from page to page

Objective 7: The application will block inappropriate behavior by preventing posts with vulgar language

Objectives: System

The following is a list of system objectives:

- **Objective 1:** System will be an android application for mobile platform
- **Objective 2:** Java Searching Algorithm will be provided to help the Search System Searching Speed
- **Objective 3:** MySQL will be used as the database server
- **Objective 4:** Android Studio will be used for implementation
- **Objective 5:** Compatible with Android with latest update version (Android 11).
- **Objective 6:** tolerate system interspace speed and actions

System Requirements – Login and Registration

Requirement Title:	Login and Registration
Sequence No:	001
Short description:	For an existing user, access to their profile. Make a new profile for new Users.
Description:	<p>This page is the first phase to the app. For an existing user, it asks the username and password and allows access to their profile if they are verified, otherwise deny them and take them to Forgot Password page which asks them to setup a new password through their email. In case of new user, they must click new user button to allow them to take them to registration page to fill out their information and create their unique username and passwords for further login to their profile.</p> <p>Available buttons:</p> <ul style="list-style-type: none"> • Forgot Password (setup new password) • Login (verify user) • New User (registration for new user) • Exit screen (or close)
Pre-Conditions:	<ul style="list-style-type: none"> • Open the app
Post Conditions:	<ul style="list-style-type: none"> • Verified users will access to their profile page. • Unverified users will be taken to forgot password page and asked security question to be authorized to create new password. • New users will be taken to registration page to fill their information and unique username and password.
Other attributes:	

Requirement Title:	Login and Registration – Forgot Password
Sequence No:	002
Short description:	This page asks the unverified users some security questions to authorize them to create new password for login.
Description:	<p>This page is the subset of the Login and Registration page which helps the user to create new passwords if they have forgotten it. This page asks the users to answer three unique security question set up by the user during the registration. After the answers are verified, they are authorized to create new passwords for their profile. The unverified answers will lock their profile for an hour and send email to the users about possible hack attempt.</p> <p>Available buttons:</p> <ul style="list-style-type: none"> • Change (change password) • Cancel (cancel action)
Pre-Conditions:	<ul style="list-style-type: none"> • User must have already registered • Validate e-mail and security question
Post Conditions:	<ul style="list-style-type: none"> • Reset password to user after correctly answering the security questions
Other attributes:	<ul style="list-style-type: none"> • Consider adding more than one security question, maybe three • Lock systems after three tries for an hour, and send an email to user

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System Requirements – Forum Management System

Requirement Title:	Forum Management System
Sequence No:	001
Short description:	Enables user to post to a forum page
Description:	<p>Users will be able to compose and post on a forum page by selecting the community they wish to post under such as:</p> <ul style="list-style-type: none">• Education• Technology• Gaming• Sports• Health• Etc...
Pre-Conditions:	<ul style="list-style-type: none">• User must already be registered• Forum page must be loaded• User must select which topic they intend to post to• User must compose and press post
Post Conditions:	Post is saved under that topic and other users will be able to comment, upvote, and report that post
Other attributes:	If user exits without posting, they will lose what they wrote

Requirement Title:	Forum Management System
Sequence No:	002
Short description:	Commenting to an existing post
Description:	Users will be able to comment to a specific post by, selecting which topic they intend to read, and comment on a specific post.
Pre-Conditions:	<ul style="list-style-type: none"> • User making comment must already be registered • Post that is being commented on must already exist • User must be on forum page and on that post, they intend to comment on
Post Conditions:	<ul style="list-style-type: none"> • Comment is posted and saved • The comment is posted under the specified topic and post
Other attributes:	None

Requirement Title:	Forum Management System
Sequence No:	003
Short description:	Upvote/Report a Post
Description:	Users will be able to Upvote and Report a post on post or a comment as well.
Pre-Conditions:	<ul style="list-style-type: none"> • User must already be registered • User must have application loaded and on the certain post or forum they wish to report • The post or comment they wish to upvote, downvote or comment must exist
Post Conditions:	<ul style="list-style-type: none"> • Upvote and Downvote counts are updated • Reports are sent to management to review
Other attributes:	None

Requirement Title:	Forum Management System
Sequence No:	004
Short description:	Explore Page
Description:	Users will be greeted upon login with the updated posts under the topics they specified.
Pre-Conditions:	<ul style="list-style-type: none"> • User must already be registered • Application must be loaded • User must specify topics of interest
Post Conditions:	<ul style="list-style-type: none"> • None
Other attributes:	If user did not specify any topics, user will be shown a post of each topic

System Requirements – Message System

Requirement Title:	Message System
Sequence No:	001
Short description:	Initiating Message to new user
Description:	<p>User must specify and verify which user they desire to message. By searching in terms of:</p> <ul style="list-style-type: none">• Name {First, Last}• netID
Pre-Conditions:	<ul style="list-style-type: none">• User must already be registered• Application must be already loaded and on message page• The user that is being sent the message must be registered as well
Post Conditions:	Message is saved and kept permanently
Other attributes:	Users will not be able to initiate group messages to promote engagement within the forum community

Requirement Title:	Message System
Sequence No:	002
Short description:	Sending a message in an existing chat
Description:	<p>Upon entering the message page user can select a previous chat and continue the conversation by selecting:</p> <ul style="list-style-type: none"> • Name {First, Last} • netID
Pre-Conditions:	<ul style="list-style-type: none"> • Application must be loaded • Message page must be loaded • User must already be registered • User being sent the message must already be registered • Message exchange between the two users must have preexisted.
Post Conditions:	Message exchange is saved and kept permanently on to the database
Other attributes:	None

System Requirements – Search System

Requirement Title:	Search System
Sequence No:	001
Short description:	User Search, search up the username on the app database
Description:	<p>Compare the string input that needed to be searched against the app database. Then use SQL queries to retrieve the list of all the users who have the exact username as the input. If the database does not have that user then it will simply prompt no search found.</p> <p>User can press:</p> <ul style="list-style-type: none">• Search• Exit screen
Pre-Conditions:	<ul style="list-style-type: none">• User must have already registered and logged in• Java searching algorithm must be available to carry out the search
Post Conditions:	<p>Display the user profile page that matches the input or take the customer to that user page</p> <p>Display “No Search Found” if that username not in our database</p>
Other attributes:	None

Requirement Title:	Search System
Sequence No:	002
Short description:	Forum Search, search up Forum on the app database
Description:	<p>Compare the string input that needed to be searched against the app database. Then use SQL queries to retrieve the list of all the forums who have the exact forum's name as the input. If the database does not have that user then it will simply prompt no search found.</p> <p>User can press:</p> <ul style="list-style-type: none"> • Search • Exit screen
Pre-Conditions:	<ul style="list-style-type: none"> • User must have already registered and logged in • Java searching algorithm must be available to carry out the search
Post Conditions:	<p>Display the forum that matches the input or take the customer to that forum page</p> <p>Display "No Search Found" if no forum with the same name in our database</p>
Other attributes:	None

System Requirements – Database

Requirement Title:	Database
Sequence No:	001
Short description:	Keeping track/Storing inserted data
Description:	<ul style="list-style-type: none"> • Saving the Users/Admins information's after application. Retrieving data when needed from searching. • Saving all the contents of a newly created Forum from users. • Granting greater privilege access to Admins. • Connecting actions from Front End to Back End. • Granting access to the forum with correct username and password that was stored on the Database Server. • Connect to the Front End and retrieving data and retrieving data back onto the interface for the search system. • user • forum
Pre-Conditions:	<ul style="list-style-type: none"> • The SQL must be coded, and design set up with foreign key and primary connected for data to be loaded in. • The SQL data base must be set up connecting to the app
Post Conditions:	All information's is saved after any actions from the interface.
Other attributes:	None



Requirement Title:	Database
Sequence No:	002
Short description:	Updating new Data to the server
Description:	<p>- Update any changes from the Users/Admins information Such as:</p> <ul style="list-style-type: none">• New Passwords• New Security Questions• Inserting new User Information's
Pre-Conditions:	<p>-The SQL Server must be up and running and loaded with existing data.</p> <p>-The SQL Server must be connected to the app</p>
Post Conditions:	All information's saved is permanent unless there has been a change and the changes will replace the old data.
Other attributes:	None



Requirement Title:	Database
Sequence No:	003
Short description:	Retrieving Data from server for user search
Description:	<p>-match the input from the search bar against the server username and retrieve their info's</p> <p>Such as:</p> <ul style="list-style-type: none"> • Username • Class • Headshot • Major name • Commuter • Summary • Preference <p>through SQL queries. Bring up the interest user page and allow other actions such as direct message or look at the profile page.</p>
Pre-Conditions:	<p>The SQL Server must be up and running and loaded with existing data.</p> <p>The SQL Server must be connected to the app.</p> <p>The requested Data must exist in order to be retrieved</p>
Post Conditions:	Load up the Data choices for the User if exist.
Other attributes:	If no search input matches the Server. Ask if the user want to try again

Requirement Title:	Database
Sequence No:	004
Short description:	Retrieving Data from server for forum search
Description:	<p>Match the input from the search bar against the server forum name and retrieve forum info's</p> <p>Such as:</p> <ul style="list-style-type: none"> • Latest Forum Content • Upvote • Comments • Username matches the Comment • Dates <p>through SQL queries. Bring up the interest forum page and allow other actions such as direct message or look at the requested page.</p>
Pre-Conditions:	<p>The SQL Server must be up and running and loaded with existing data.</p> <p>The SQL Server must be connected to the app.</p> <p>The requested Data must exist to be retrieved</p>
Post Conditions:	Load up the Data choices for the Forum if exist.
Other attributes:	If no search input matches the Server. Ask if the user want to try again.

System Requirements – Misconduct System

Requirement Title:	Misconduct System
Sequence No:	001
Short description:	Penalty enforce system for inappropriate behavior
Description:	Misconduct system for the application which is responsible for enforcing inappropriate behavior. Administrator is responsible for deleting posts that are inappropriate and updating the inappropriate words list. Before every post is posted it will first check for inappropriate words with the inappropriate word database
Pre-Conditions:	<ul style="list-style-type: none">• Administrator has the option to delete a post or comment from the database• Needs a unique identifier to delete a certain post
Post Conditions:	None
Other attributes:	None

System Requirements – Graphical User Interface (GUI)

Requirement Title:	Graphical User Interface
Sequence No:	001
Short description:	Foreign Page, display feeds on a community page
Description:	<p>This page will display all the posts of a certain community selected. The user can like, comment, or report a post. The user will have a tool bar of buttons at the bottom of the screen to go to different pages/activities within in the app</p> <p>Available buttons:</p> <ul style="list-style-type: none">• Upvote (like/upvote a post)• Comment (comment on a thread or a comment itself)• Report (report a post or comment)• Message Page• Write Post Page• Profile Page• Joined Forums Page• Search Page
Pre-Conditions:	<ul style="list-style-type: none">• User must have been a part of certain communities• If user is not a part of any recommend some communities
Post Conditions:	<ul style="list-style-type: none">• Every time the user refreshes the page the content must be updated from the database
Other attributes:	None

Requirement Title:	Graphical User Interface
Sequence No:	002
Short description:	Message Page, displays all the conversations the user has with others
Description:	<p>This page will display all the conversations with users. From here the user can enter individual chats and start back off where they left in the conversation</p> <p>Available buttons:</p> <ul style="list-style-type: none"> • Individual Chats (enter previous chats) • Pen (write a new chat) • Foreign Page • Joined Forums Page • Search Page • Write Post Page
Pre-Conditions:	<ul style="list-style-type: none"> • The user information will be passed from page to page and display all the individual chats
Post Conditions:	<ul style="list-style-type: none"> • If a new chat is formed or a chat continues, then update the List of individual chats which will then update the database
Other attributes:	None

Requirement Title:	Graphical User Interface
Sequence No:	003
Short description:	Message Page – Individual Chat Shows chat history with selected user
Description:	<p>This page will show the chat history with the selected user. Users can start a conversation or pick up from an existed conversation. The user can send directed messages to another user from this page</p> <p>Available buttons:</p> <ul style="list-style-type: none"> • Send (send message) • Back (go back to Message Page) <p>Actions:</p> <ul style="list-style-type: none"> • Scrollable (see previous messages) • Text Entry (type message to user)
Pre-Conditions:	<ul style="list-style-type: none"> • Needs to access the database to display any previous chat history
Post Conditions:	<ul style="list-style-type: none"> • Each message sent will update the chat history within the database
Other attributes:	None

Requirement Title:	Graphical User Interface
Sequence No:	004
Short description:	Profile Page, displays all the User's background information
Description:	<p>a. First, Last-- Name</p> <p>b. Student ID</p> <p>c. Class</p> <p>d. Headshot</p> <p>e. Major Name</p> <p>f. Commuter</p> <p>g. Summary (max: 255 characters)</p> <p>Available buttons:</p> <ul style="list-style-type: none"> • Show Others (view from other users' perspective) • Class (drop down button) • Commuter (check mark button) • Edit (edit user information) • Foreign Page • Joined Forums Page • Search Page • Write Post Page <p>Available Text Entries:</p> <ul style="list-style-type: none"> • Name (20 characters) • Student ID (10 characters) • Major Name (20 characters) • Summary (255 characters)
Pre-Conditions:	<ul style="list-style-type: none"> • User information should be filled out when the user registers
Post Conditions:	Update the database every time the user updates their information by pressing the submit button when in editing mode
Other attributes:	None

Requirement Title:	Graphical User Interface
Sequence No:	005
Short description:	Write Post Page
Description:	<p>This page will allow a user to write a post to a certain community.</p> <p>Available Buttons:</p> <ul style="list-style-type: none"> • Forum/Community name (drop down button) • Post (post a post) • Cancel (cancel post) <p>Available Text Entries:</p> <ul style="list-style-type: none"> • Post (255 characters)
Pre-Conditions:	<ul style="list-style-type: none"> • The system should have a connection to the database so that the post could be shown throughout the app
Post Conditions:	<ul style="list-style-type: none"> • When the post is posted the database should be updated and the post should be at the top because it is the most recent post
Other attributes:	None

Requirement Title:	Graphical User Interface
Sequence No:	006
Short description:	Joined Forum Page, displays all the forums/communities the user has joined
Description:	<p>Available buttons:</p> <ul style="list-style-type: none"> • Unjoin (unjoin a forum/community) • Message Page • Forum Page • Message Page • Write Page • Search Page • Profile Page
Pre-Conditions:	<ul style="list-style-type: none"> • Pass the user information from main activity to this activity
Post Conditions:	<ul style="list-style-type: none"> • If the user chooses to unjoin a forum/community then it needs to be updated and sent to the database
Other attributes:	None

Requirement Title:	Graphical User Interface
Sequence No:	007
Short description:	Search Page, searches for available forums across the app
Description:	<p>Available buttons:</p> <ul style="list-style-type: none"> • Cancel • Search <p>Available Text Entries:</p> <ul style="list-style-type: none"> • Search Bar (type to search for communities)
Pre-Conditions:	<ul style="list-style-type: none"> • Needs a list of all the available forums/communities so that the edit distance algorithm can be used
Post Conditions:	<ul style="list-style-type: none"> • If there are no exact searches, then display the closet forum/community name
Other attributes:	None

Hardware and Infrastructure

- MySQL Server
- Android latest release 10.01.0_r47
- Kernel type Monolithic Kernel Linux

Assumptions

The following is a list of assumptions:

- Only people from UTA can use this product
 - This is only work if we have UTA database but we cannot get it so it is hard to keep track of user not from UTA
- Only allows positive comments from Users and keeps or takes away the negativity.
- Database Server Has to up for it work. Technically 24/7 hosting the server
- Admin must check daily and determine the actions if the user report and make decision on banning or not
- Detect people

Constraints

The following is a list of constraints:

- Team lacks android development skills
- Java is not our strong language
- Not being able to work in person
- Communication
- Midterms and other classes materials that is holding our minds back
- Dedicate time meet for team because sometimes things happen
- Keeping All team members up to date and have the same idea of implementation and design
- Connecting different system together
- Internet and phone signal when communicate. Sometimes our conversation drops due to signal or background noises and it cause frustration and confusion

Out of Scope Material

The following is a list of “out of scope” material:

- Post Project maintenance is not covered
- Project Security
- How to Interact and Persuade Client
- Project Time Efficiency
- How to interact with other teams’ members
- How to keep everyone on the same page during teamwork
- The numbers of records the system should be able to hold
- The Number of hours a system should be available
- Post Project Adding Features is not covered
- Cost Estimates and Project Success Determination out in the market after Implementation

Delivery and Schedule

Task/Milestone Description	Anticipated Start Date	Anticipated End Date	Status ("Complete"; "In progress", TBC")	Comments
Prepare UML diagrams	9/14/2020	10/1/2020	Complete	UML diagram delivered Increment 1 Deliverable
SRA document (Includes project objectives, Requirements and UML diagrams)	10/2/2020	10/29/2020	In Progress	Deliverable will be the SRA document. All stakeholders agree on the content of the SRA by signing in section 8. Increment 2 Deliverable
Design: Design big picture, define format, navigation and functionality to include	10/29	11/8	To Be Completed (TBC)	Team
Implementation: Home screen design	11/8	11/15	TBC	Team
Implementation: Login and registration	11/10	11/25	TBC	Yugal Shetha
Implementation: Forum Management System	11/10	11/17	TBC	Liiban Gelle
Implementation: Forum Management System	11/17	11/25	TBC	Liiban Gelle

Implementation: Database	11/10	11/17	TBC	Hung Nguyen
Implementation: Search System	11/17	11/25	TBC	Hung Nguyen
Implementation: Interface	11/10	11/17	TBC	David Trimino
Implementation: Misconduct	11/17	11/25	TBC	David Trimino
Test case design	10/30/2020	11/19/2020		Increment 3 Deliverable
External Documentation (i.e. User Manual)	11/20/2020	12/8/2020		
Project presentation	11/20/2020	12/8/2020		
Final Milestone: project delivery		12/8/2020		Increment 4 Deliverable

Stakeholder Approval Form

Stakeholder Name	Stakeholder Role	Stakeholder Comments	Stakeholder Approval Signature and Date
Bahram Khalili	Development Mgr		
Akshit Singhal	Project Assistant		
Hung Nguyen	Developer		Nguyen,10/29/2020
David A. Trimino	Developer		Trimino,10/29/2020
Liiban Gelle	Developer		Gelle,10/29/2020
Yugal Shestha	Developer		Shestha,10/29/2020

Test Cases

Introduction and Plan of Approach

UTA COMMUNITY is an android app, that creates a community atmosphere for students virtually by providing information on various forums such as: General Campus Information, Book Giveaways, Sport events, Traffic News, Club information, Campus Attractions, Entertainment etc. This app is exclusively for the members of UTA to help them socially, save time and effort.

The components that will be covered in this test plan are:

1. Login and Registration
2. Forum Management System
3. Messaging System
4. Database System
5. Searching
6. Misconduct System
7. Graphical User Interface

The test tools we intend to use for the test cases will be a form of regression testing framework that will be implemented in unit tests in Java. We have selected to go with JUNIT due to its open-source nature and flexibility.

These test plans were curated by the respective developer for that component. To list, Yugal oversees login and registration, Liiban is in charge of Forum Management System and Messaging, Hung is in charge the Database System and Search, and David is in charge of Misconduct System and Graphical User Interface.

After some discussion within our group, we have decided to omit some planned functionalities to the UTA Community app for optimization and creating a better atmosphere for our users. This includes, _____, upvote, downvote, and

The upvote and downvote was decided to be omitted due to the negativity it might bring within the forum community. Today everything gets judged and can bring another level of psychological stress for our end users, college students. We want to promote a positive environment for the user and not be discouraged to post due to the amount of downvotes they received and the less upvotes they were

given on a certain post. An example of this would-be Instagram, that gave users option to not see the like count. This has become extremely popular and shows the inclination that users tend to not like to be in a judgmental environment. Once the app has been established, we plan to have our users vote on whether they want to have implemented or not.

Test Case: Login and Registration

Project Name: UTA COMMUNITY
Test Case Name: Registration and Login
Test Case Id: CSE3310/Fall 2020/Team7/ Registration and Login

Test Case No.	Test Case Description	Expected results	Outcome Pass, Fail, Other (comments)
TC1	Tab into the User and password fields and enter a valid user id/password	System should let you in.	
TC2	Tab into the User and password fields and enter an invalid user id/password	System should not accept and prevent you from entry.	
TC3	Press "Forgot password"	System should: Ask answer to security question and if correct, an e-mail with a temporary password should be sent.	
TC4	Press "New user"	System should take you to the registration page.	
TC5	The required fields: "Name, Student ID, Major, E-mail, Address, User ID, Password", left blank.	System should ask you to fill the required fields again.	
TC6	Student ID, E-mail, User ID is not unique or matches database.	System should: Show message "Invalid credentials" and keeps you on same page.	
TC7	Fill the required field with valid credentials and press "Create Account".	System should access to the home page.	

Test Case: Forum Management

Project Name: UTA COMMUNITY
Test Case Name: Forum Management System
Test Case Id: CSE3310/Fall 2020/Team7/ Forum Management System

Test Case No.	Test Case Description	Expected results	Outcome Pass, Fail, Other (comments)
TC1	User tabs to the forum button	System should let you in to the selected forum community	
TC2	User attempts the comment on post	System should allow user to make comment	
TC4	User clicks on a specific post	System shows the post on a whole page and any comments associated with it.	
TC5	User is finished with their post/comment and clicks out of post	System takes user back to previous page	

Test Case: Messaging System

Project Name: UTA COMMUNITY
Test Case Name: Messaging
Test Case Id: CSE3310/Fall 2020/Team7/ Registration and Login

Test Case No.	Test Case Description	Expected results	Outcome Pass, Fail, Other (comments)
TC1	User tabs to the Message button and enter to direct messaging page	System will allow user to continue.	
TC2	User clicks on box and compose message	System allows user to compose message.	
TC3	User sends message to another user that exists	System notifies another user message has been received	
TC4	User attempts to send message to user that does not exist	System should not allow user to send message	

Test Case: Database System

Project Name: UTA COMMUNITY
Test Case Name: Messaging
Test Case Id: CSE3310/Fall 2020/Team7/ Registration and Login

Test Case No.	Test Case Description	Expected results	Outcome Pass, Fail, Other (comments)
TC1	Tap register button	Data on the new user must be unique. Data must be inserted and store successfully on firebase.	
TC2	Tap Login button	Data inserted on the interface must match against an existing data in the database storage for granting access	
TC3	Tap Create New Forum button	The ID of the forum must be unique for newly created forum. And new data on that forum only insert to that forum content storage but not others	
TC4	Tap Create Message button	The ID of the message must be unique for newly created message. And new data on that message only insert to that message content storage but not others	

Test Case: Search System

Project Name: UTA COMMUNITY
Test Case Name: Search
Test Case Id: CSE3310/Fall 2020/Team7/ Search

Test Case No.	Test Case Description	Expected results	Outcome Pass, Fail, Other (comments)
TC1	Search User on Success	Retrieve and display the unique username that match against the database storage.	
TC2	Search User on Failure	Prompt user" no search found"	
TC3	Search Topic name on Success	Retrieve and display the unique Topic that match against the database storage.	
TC4	Search Topic name on Failure	Prompt user " no search found "	

Test Case: Misconduct System

Project Name: UTA COMMUNITY
Test Case Name: Misconduct System
Test Case Id: CSE3310/Fall 2020/Team7/ Misconduct System

Test Case No.	Test Case Description	Expected results	Outcome Pass, Fail, Other (comments)
TC1	Test for certain words within a post or summary	The post should deny any vulgar words that are in the text file	
TC2	Test for similar words using the vulgar-word file within a post or summary	The post should deny any vulgar words that are similar in the text file (fck is like f***)	
TC3	Test for profanity words in the direct messaging system	The message should not send and notify the user about UTA's policies on virtual interactions	
TC4	Test the report button	Report button should notify UTA IT administration to review and take down the post	

Test Case: Graphical User Interface (GUI)

Project Name: UTA COMMUNITY
Test Case Name: Graphical User Interface
Test Case Id: CSE3310/Fall 2020/Team7/ Graphical User Interface

Test Case No.	Test Case Description	Expected results	Outcome Pass, Fail, Other (comments)
TC1	User should be able to switch between all screens/pages (activities) rapidly	The application should not crash	
TC2	All buttons should work appropriately	Buttons should have a corresponding action when clicked	
TC3	If a forum is more than 250 words, then give an alternative to display	There should be a “more” button after the 250th word to read more about the post	
TC4	Display data in appropriate page when switching from page to page	Data that is for the chat page should not be displayed in the forum page	

Firestore Database



Developer Implementations

Hung Nguyen (Search and Database System)

- Search System
 - Inside direct message option the user will be able to locate who they are trying to send the message to. The Search list view will list all the current users that are available in the system and once the user clicks on the person they are trying to talk to. The Interface will then take them to message page. Since we do not assign to anyone a message home page, we are not able to pull up the message on the receiver page but on the message page you can see that we are able to get the current user email address and the selected receiver for the message also the content of the message. If we do have a message page it would not be long for us to retrieve the data and display the messages between 2 users.
 - Search forum, it is the same concept as search user for messaging but instead of search reference for user I search reference for forum so that the user could follow up a particular forum they are interested in and be able to check out that forum. The query will automatically string match the result and retrieve only the data name that contained the string input inside the search bar. The query retrieving string match is real time.
- Database
 - Engaged and attempt to make an XAMPP database early on for the app but failed then reached out to find out about firebase to implement it for the app. Set up the database successfully and be able to reference all the data to go to the correct reference path on firebase database. Retrieving data with data snapshot for messages and search system to display the content that was save op the database > Implemented Login system early on since the Yugal did not start it early and did not send over the code. Login will get the user information then match it against the database if the user exists then allow the user to log onto the home activity. Without that incident about having to spend more time to implement that member part. I believe our product would be far more success than it is currently is at this point.

Lee Gelle (Forum, Comments, Navigation, and Registration)

NOTE: Login was developed by Hung Nyguen, and Registration was developed by Liiban. This was originally Yugal's task but due the fact that we did not receive any code from him until 12/08 we took it upon ourselves to develop those components on behalf of the team. This resulted in some aspects of the code not being finished such as messaging and minor bugs. Due to the code Yugal being sent on the due date 12/08 we did not have time to incorporate it with our code and will be sending it separately.

SEPARATE NOTE: Home2Activity was the main page in which all three group members, Liiban, Hung, & David helped with.

Registration has files:

1. Activity: RegistrationActivity
2. Layout (XML): activity_register
3. Functionality: User can register onto the app and add a photo as well. User must add photo to fully register onto the app. Click on the photo that has a plus on it to add a photo. This data is sent to the database and used as reference when user is logging in.

Forum has files:

1. Activity: Home2Activity, PostConnector, and Forum
2. Layout (XML): popup_addpost, post_setup
3. Functionality: User can create a post and view other posts as well by clicking on it. Once user click on the green + it will post it onto the database and save it. All new posts are sent to the bottom of the feed giving priority to older posts to get more traction.

Navigation has files:

1. Activity: Home2Activity
2. Layout (XML): activity_main_drawer, nav_main_header, activity_home2
3. Functionality: User is able to navigate through the pages such as Search, Message, and go back to the home page.

Comment has files:

1. Activity: CommentConnector, Comment_Add, PostInfo
2. Layout (XML): comment_layout, activity_post_info
3. Functionality: User can make comments and view other comments once they've added a comment. User can scroll and see different comments.

David Trimino (Graphical User Interface, Misconduct System, and Messaging System)

Misconduct System:

1. Activity: Home2Activity.java
2. Functionality: Prevent the user from using vulgar or inappropriate languages when commenting or creating a new comment. Helps keep the virtual environment more safe

Graphical User Interface:

1. Layout (XML): all xml files
2. Functionality: Make the application user friendly and to navigate through the app with ease. Users will be able to see posts, comments, and messages all through out the application. As well as see different pages with different topics: whether it be the forum page or messages page

Message System:

1. Activity: ListUser.java
2. Functionality: Helped developed the user list to messaging page to see who the sender and the receiver of the message is.

Yugal Shrestha (Login and Registration)

Yugal implemented his own login and registration that was not incorporated into the UTA Community application, because he completed his code at 12/8/2020 2:11pm which did not give us sufficient time to fully incorporate the android application.