SRI LANKA INSTITUTE OF ADVANCED TECHNOLOGICAL EDUCATION

Higher National Diploma in Information Technology

System Requirement Specification Document

"Hello" Social Media Web Application

Individual project

ANU/IT/2019/F/0006 | H.M.P.G.S.Dilshan

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1. INTRODUCTION

This System Requirements Specification document is submitted to meet the requirements of the “HELLO” social media web based application for the second year individual project module conducted by the **Sri Lanka Institute of Advanced Technological Education (SLIATE)**. Scope of the project, functional requirements with use case diagram and non-functional requirements are included in this document.

There are many social media websites in today. But the “HELLO” will be the best one of among them. It will provide a unique solution for all problems in other social media applications. It will very easy and effective to get connected using this application because all user requirements specified in this SRS document. An SRS minimizes the time and effort required by developers to achieve desired goals and also minimizes the development cost. A good SRS defines how an application will interact with system hardware, other programs and human users in a wide variety of real-world and practical to implement situations.

2. PURPOSE

The purpose of this SRS document is to provide a detailed overview of the software product, its parameters and goals. This document describes the project's target audience and its functional and non-functional requirements. Before start developing, had to specify users’ requirements and functions going to be developed. This is a case study of all requirements which is about functional and non-functional requirements. All of those functions explained in this document with relevant use cases with their pre-conditions, post-conditions and alternative flows that occur when unexpected user input. Also a good software must have some non-functional requirements. If not considering them, the application will not be able to fulfill users’ requirements. Those non-functional requirements are also explained in this document.

3. SCOPE OF THE PROJECT

"HELLO" is a social media web application which is totally responsive, that means can open on any computer, mobile phone or tablet using any web browser. It has very user friendly design and easy to use.

Users can register and log in to the application. Without registering, users cannot see posts, after registering users can see only their friends' posts. That means this application protects users' privacy.

Users can post images, quotes, status or anything they want. Also they can like and comment to the posts. The newest posts come to the top of the news feed.

Users can chat with their friends. It is real time, that means uses can see the message same time that the other user sends. It is not needed to refresh again and again.

Users can play small game while using the app. The score is calculated by the application itself.

Users also can search latest news on famous sites like CNN, BBC using voice assistant. The only thing user needs to do is say the key world that needs to search. Also this virtual voice assistant will read those news for users.

Finally users can log out, after that any other cannot view that users' profile without having log in details. It is safe to log out every time user doesn't use the application.

4. FUNCTIONAL REQUIREMENTS

4.1. Actor Description

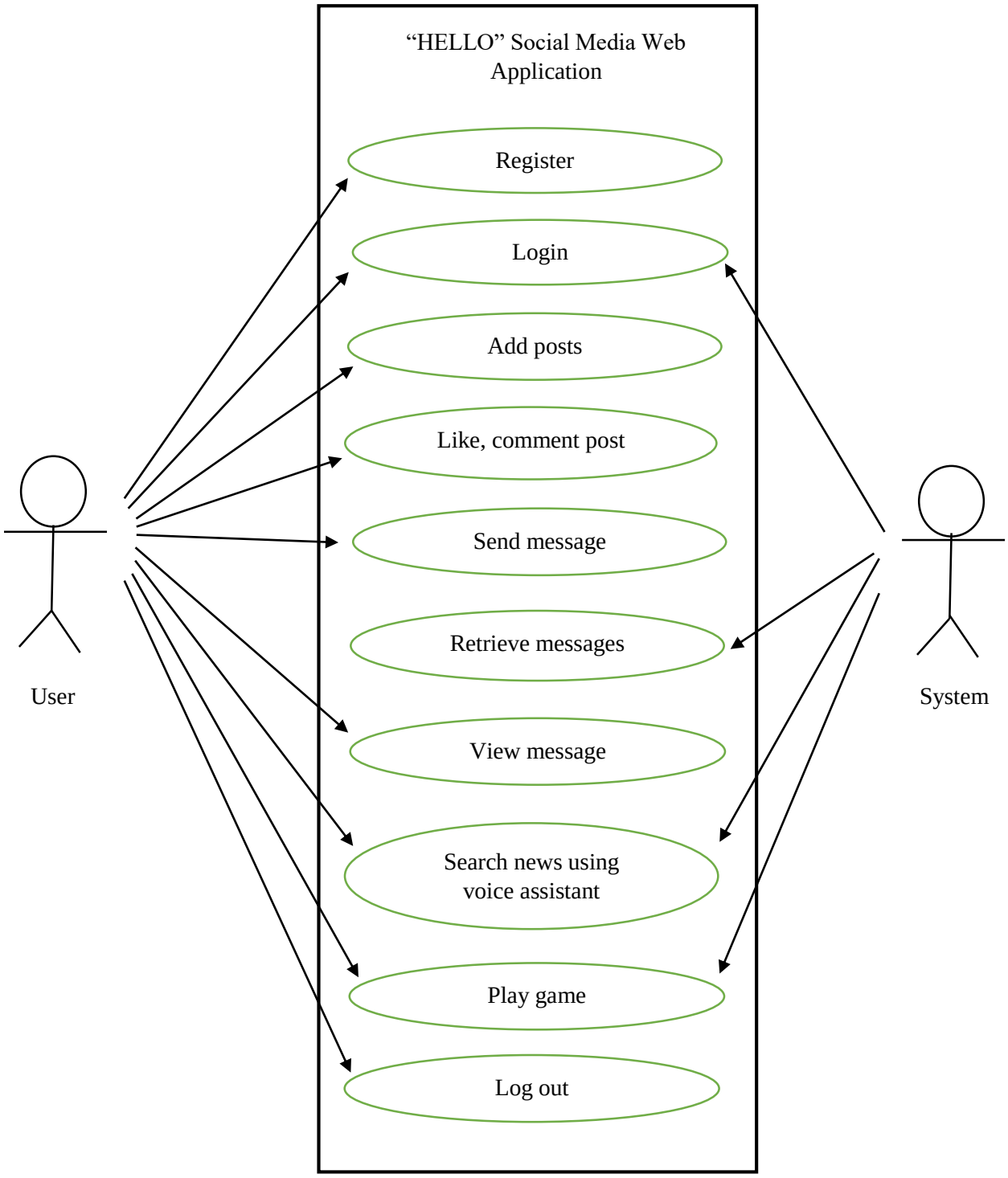
User:

User is the main character in this system. All the functions are built around the user. User can be child, teenager or adult. All the people can use this. Users can view and upload posts, like comment, play games and many more.

System:

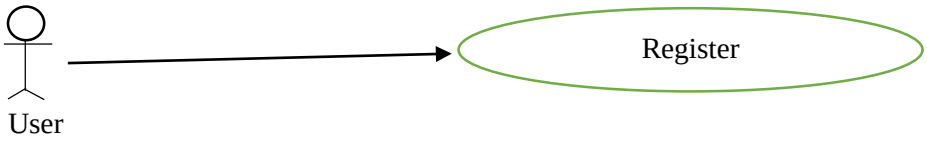
Sometimes, the system behave as an actor. For example in the login process the system is an actor and it perform some operations also when game playing, system behave as an actor and generate scores.

4.2. Use Case Diagram



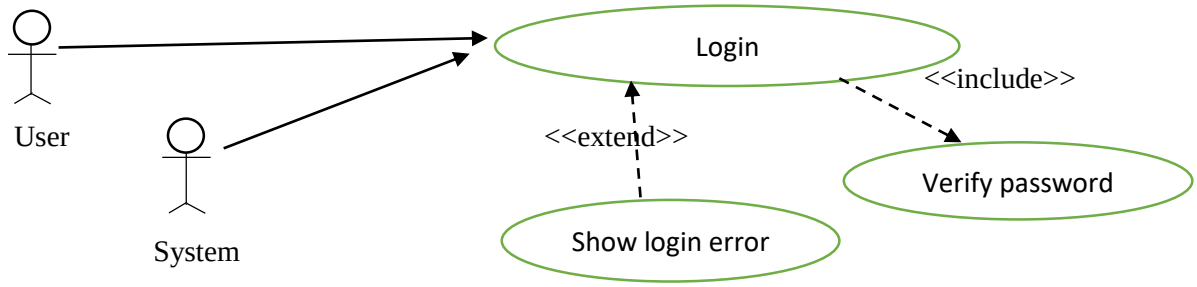
4.3. Case Description

4.3.1. Case 01



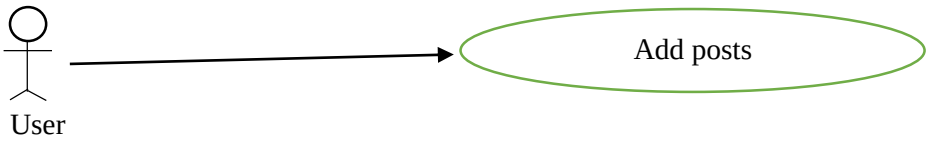
Case Name	Register
Actor	User
Overview	New users need to register.
Description	1. Visit website 2. Click on register 3. Fill the registration details 4. Submit the details
Post-conditions	• Display the message “Registered successfully”. • Redirect to the Login page.
Alternative flows	• When submit details with empty field, display relevant error message. • When submit with wrong data type or value, display relevant error message.

4.3.2. Case 02



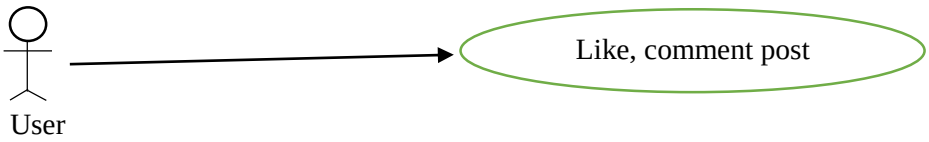
Case Name	Login
Actor	User, System
Overview	Users need to login to the application.
Description	1. Go to login page. 2. Fill login details. 3. Hit login button.
Pre-conditions	• User should register first
Post-conditions	• Display the message “Logged in successfully”. • Redirect to the home page.
Alternative flows	• When submit details with empty field, display relevant error message. • When submit with wrong login details, display relevant error message.

4.3.3. Case 03



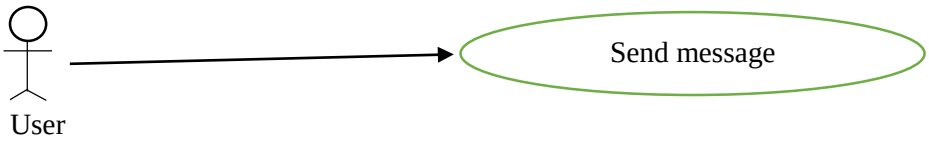
Case Name	Add posts
Actor	User
Overview	Users can add posts.
Description	1. Go to news feed 2. Create any post and upload.
Pre-conditions	• User needs to logged in.
Post-conditions	• Show the users post on the top of news feed real time.

4.3.4. Case 04



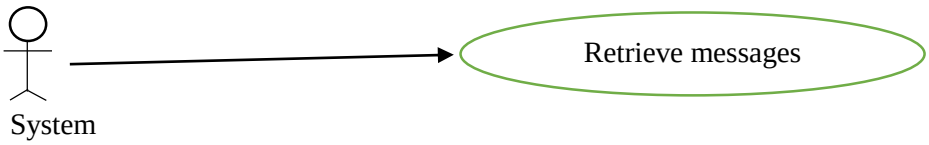
Case Name	Like, comment post
Actor	User
Overview	Users can comment and like the posts.
Description	1. Go to news feed 2. View any post. 3. Add comment or like.
Pre-conditions	• User should have logged in first. • It should have uploaded posts.
Post-conditions	• Show the users like or comment on the relevant post.

4.3.5. Case 05



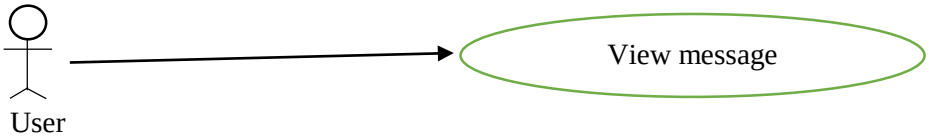
Case Name	Send message
Actor	User
Overview	Users can send messages to another users
Description	1. Go to messages tab. 2. Select any user. 3. Type the message and send it.
Pre-conditions	• User should have logged in first.
Post-conditions	• Display the message on the right side on the chat.

4.3.6. Case 06



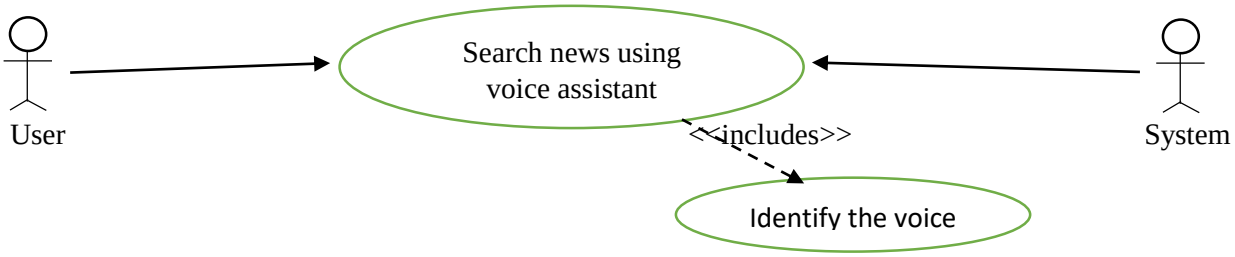
Case Name	Retrieve messages
Actor	System
Overview	Retrieve messages from database and display on the chat.
Description	1. Retrieve the message from firebase 2. Display message on the chat.
Pre-conditions	• User should have logged in first. • User had sent a message.
Post-conditions	• Display the messages on the chat.
Alternative flows	• If system can't retrieve messages from data base it should display a relevant error.

4.3.7. Case 07



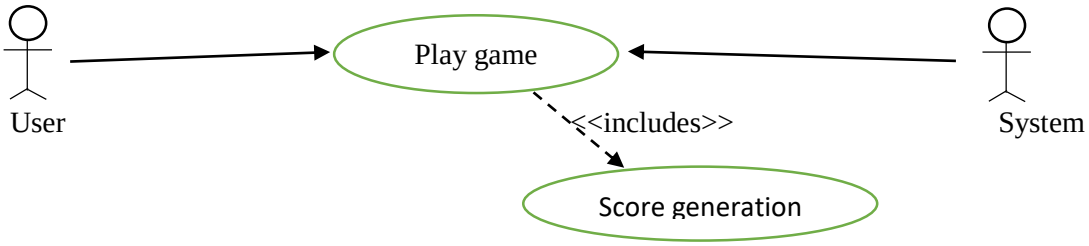
Case Name	View Message
Actor	User
Overview	Users can see messages from other users.
Description	1. Go to messages tab. 2. Select any user. 3. See the messages
Pre-conditions	• User should have logged in first. • Any user should have send a message to the user.
Alternative flows	• If can't load messages, display "Something went wrong".

4.3.8. Case 08



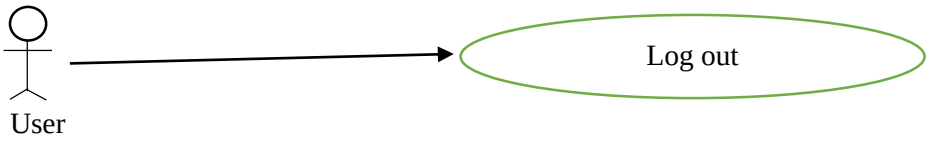
Case Name	Search news using voice assistant
Actor	User, System
Overview	Users can find news using their voice. System identifies voice and execute the relevant command.
Description	1. Go to the news tab. 2. Click start button. 3. Search news using voice.
Pre-conditions	• User should have logged in first.
Post-conditions	• Identify the voice. • Execute the relevant command. • Display the news relevant to the voice.
Alternative flows	• If cannot identify the voice, display “Say it again”. • If there is no news regarding the voice, display “Sorry no result”.

4.3.9. Case 09



Case Name	Play game
Actor	User, System
Overview	Users can play a game System generates the marks
Description	1. Go to the game tab 2. Click start button. 3. Play the game.
Pre-conditions	• User should have logged in first.
Post-conditions	• Display the user's marks. • If the user loose, display "Try again". • If the user wins. Display "You win".
Alternative flows	• If can't load the game, display "Try again later". • If user done unexpected thing, display "Try with the correct way".

4.3.10. Case 10



Case Name	Log out
Actor	User
Overview	Users can log out.
Description	1. Go to logout tab. 2. Click the log out button.
Pre-conditions	• User should have logged in first.
Post-conditions	• Display message "You are safe to go". • Redirected to the login page.
Alternative flows	• If user couldn't logged out, display "please try again later".

5. NON-FUNCTIONAL REQUIREMENTS

A non-functional requirement is a requirement that specifies criteria that can be used to judge the operation of a system, rather than specific behaviors. They are contrasted with functional requirements that define specific behavior or functions. It defines how system supposed to be.

Portability

Portability defines how a system or its element can be launched on one environment or another. It usually includes hardware, software, or other usage platform specification. “HELLO” is totally responsive and can use any device without any issue.

Reliability

This quality attribute specifies how likely the system or its element would run without a failure for a given period of time under predefined conditions.

Maintainability

Maintainability defines the time required for a solution or its component to be fixed, changed to increase performance or other qualities, or adapted to a changing environment.

Security

This non-functional requirement assures that all data inside the system or its part will be protected against malware attacks or unauthorized access. “Hello” can be accessed only for registered users with their log in details, so users are safe with their privacy issues.