

Project :

Kammelna

N	Student Name	Student Number
1	Abdullah Nasser Almohsen	443050664
2	Saeed Abdullah Alghamdi	443051079
3	Saleh Khaled Alenzi	443050964

Supervised by: **Dr. Mohammed Assiri**

Year: **2023**

1-Introduction:

Our project is about "Kammelna - كملنا"

Kammelna is an app game for the most popular cards games in Saudi Arabia "Baloot – بلوت". This app allows its users to play Baloot online with other users in around the world. This app has an easy and simple interface to use. In this app, you can create private rooms to play with friends. Also, you can join public rooms with other players. Overall, Kammelna is a very good choice for Baloot players who want to play the game anytime and anywhere with players around the world.

2-Problem:

Baloot players need an easy way to play Baloot, because not all the time players can play with their friends every day, so Kammelna app provides playing on a daily basis, the player needs to play with their Friends who are in other places or regions. The professional Baloot player wants to play in tournaments. The beginner player needs to be trained practically to play Baloot.

3-Background:

"Kammelna - كملنا": is an app game allows its users play Baloot online. You can play it either with friends or with other players in the world. The app is free and there is a subscription that gives extra features. One of the best features in the app is the ranking system which determines the level of the player to put the player with other players who has the same level to make the game is competitive and fun.

Kammelna has great popularity in the Arabian countries especially in Saudi Arabia because Baloot is which is one of the most popular card games. You can play it anytime and everywhere.

4-Sloution:

Kammelna app offers several solutions and features that help users enjoy the game and improve their experience. The features of these solutions are as follows:

1-Playing with Artificial Intelligence: Kammelna app offers the option to play with Artificial Intelligence, where users can play against the computer that features an adjustable difficulty level to improve their skills in the game.

2-Playing Online: Kammelna app offers the option to play with other players online, where users can enjoy the game with their friends or other players from all over the world.

3-Quick Play: Kammelna app allows users to play the game faster and more efficiently by adding Quick Play options and reduces the time consumed in the game.

4-Customizable Game Options: Kammelna app offers customizable game options, where users can change the background, colors, and settings to make the game experience more suitable and personalized.

5-Statistics and Progress Tracking: Kammelna app allows users to track their progress in the game and know the statistics related to their performance by displaying detailed statistics and reports that show the winners, losers, and win rates.

6-Game Guide: Kammelna app includes a guide for users that explain how to play and the rules, and users can refer to it at any time during a game.

7-Technical Support: Kammelna app provides technical support for users, where they can contact the support team to get help in solving any problems they encounter in the game or to provide any inquiries or Suggestions for improving the game. The game is also regularly updated to maintain its quality and improve the user experience.

5-Work plan:

If we are the ones who create the app, we will do the following:

First, we need to understand and figure out the requirements and features needed for the app and record it. Also, we need to record users needs and record the problems in apps that use the same idea.

Second, we need to design a simple, well-looked user interface.

Third, we need to start software development with the suitable programming language to develop the app on iOS devices, and Android devices.

Fourth, we need to conduct extensive testing to ensure that the app works and interacts properly with users without glitches or problems.

Fifth, after testing and checking that the app works properly, we need to release the app on applications stores (App Store for iOS devices and Google Play for Android devices).

Finally, we need to continue to monitor, maintain, and update the app regularly to improve performance, fix bugs, and update and add the features.

2-Project requirements

1-Functional requirements

-Technical support: one of the essential functional requirements in many apps that allows the users to interact with each other is, it must have technical support. in case any problems, glitches, crashes, or cheating cases happening in Kammelna.

-Creating accounts and signing in: also, one of the essential functional requirements in many apps is creating an account and login. The app must allow the users to create their own accounts and login using their username and password. Also, the system

must allow users to log in with their Google and apple accounts. Or register with Kammelna account.

-account management: the users can change their account information at any time. For example, changing the email, username, and password. Also, the users suspend their accounts temporarily or delete their accounts permanently.

-Record the results and progress: the moves of the players and their progress must be recorded at the same time the points are recorded and updated automatically.

-Creating rooms: the users can create public or private rooms to play and inviting friends to join them the games.

-Text Chatting and voice chatting (users communication):

The users can communicate with each other in the middle of the game through text messages or voice chatting.

-The system must allow users to reset their password by clicking on "I forgot my password" and receiving a link to their verified email address.

-The system must allow the user to submit feedback through a contact form in the app.

- The system should allow the user to buy coins (currency in the game) from the app.
- Users can enter credit card information or use Apple Pay to buy the coins.
- The system must allow users to buy via Apple Pay or STC Pay.

2-non-Functional requirements

- Ease of use: The app should be easy to learn and use, the app should have a simple and clear user interface that contains clear explanations to it and some tutorials and instructions
 - The training time should not be more than 3 minutes.
- The good performance: The app should be working smoothly and without delay, especially with the fast playing from the players, this is done by updating and improving the algorithms and the techniques that have been used and the app.
 - Each event shall be done within 2 seconds.
- Compatibility: The app should support different devices. For example, smart phones, tablets, and computers. Also, the app should support multiple operating systems. For example, iOS, Android, Windows, and Mac.

- Our goal is to make the app available in many devices.

-Support multiple languages: apart from Arabic language, the app should offer some of the most popular languages. For example, English, French, Hindi and Chinese.

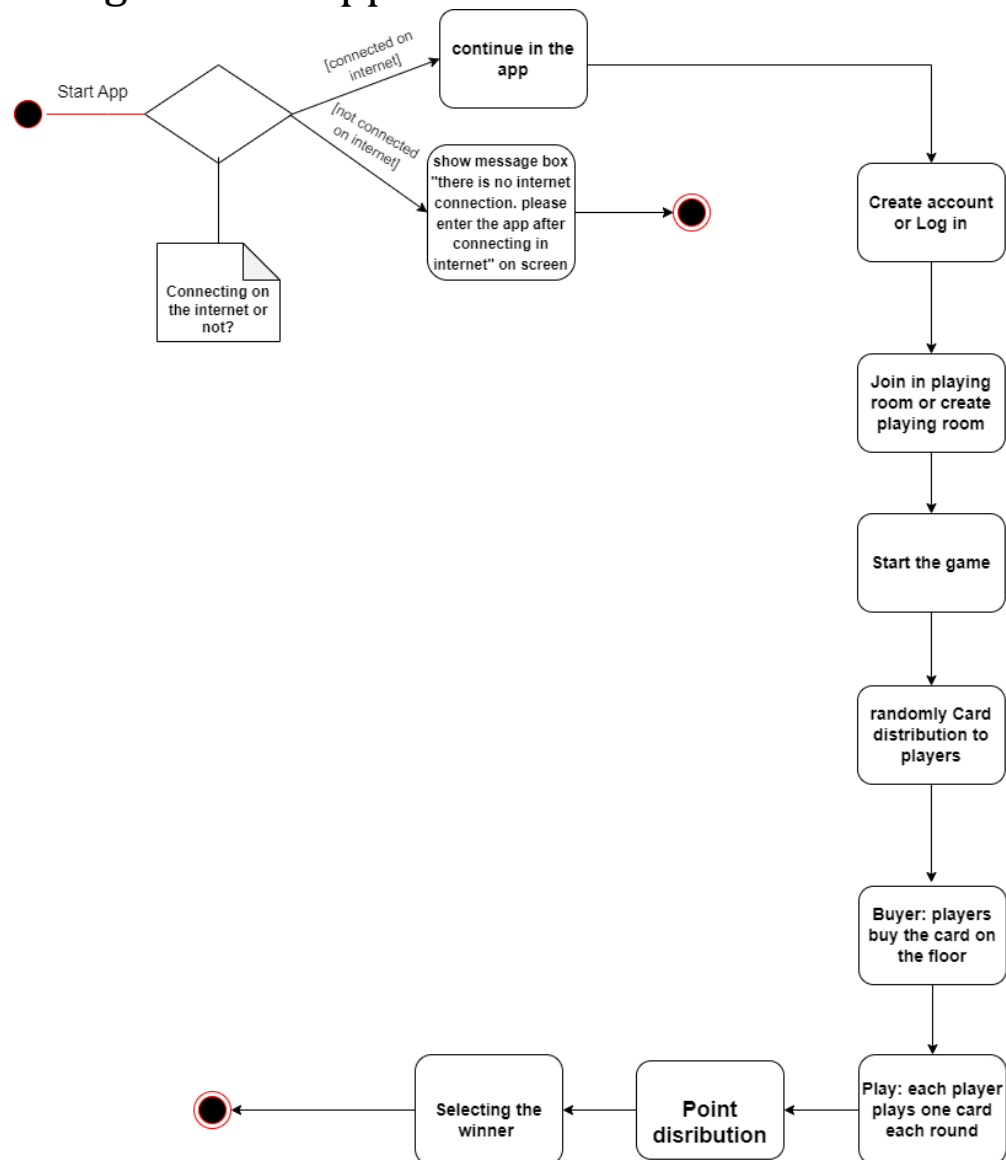
- Our goal is to support many languages to make the app widespread.

-Availability: The app should be working 24/7 non-stop. That is done by coming up with dependable and strong servers.

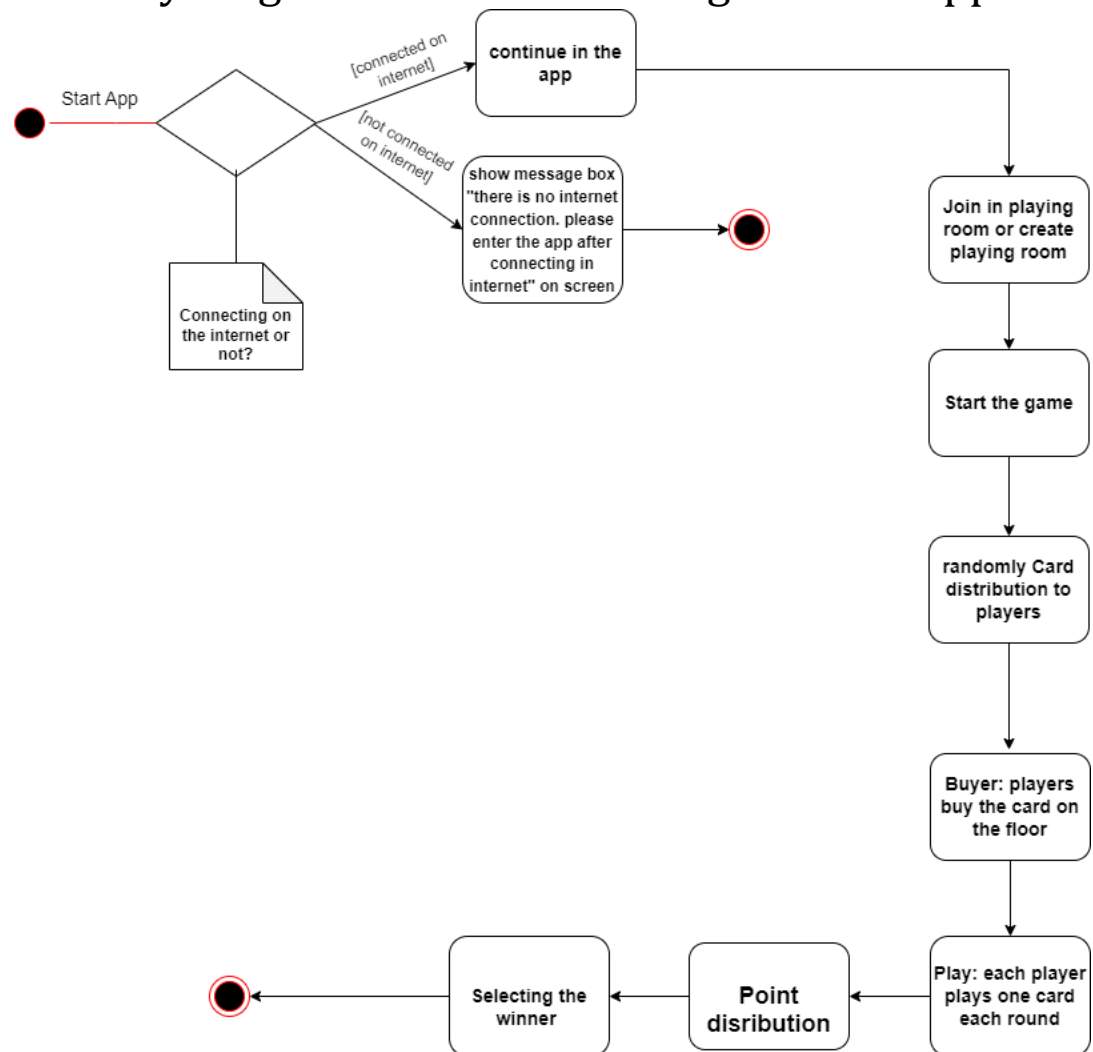
- The Rate of failure occurrence should be less than 1% in each day.

3-Activity Diagram

-Activity diagram if the user did not create an account or log in in the app.



-Activity diagram if the user did log in in the app.



4-Project Use Case Diagram

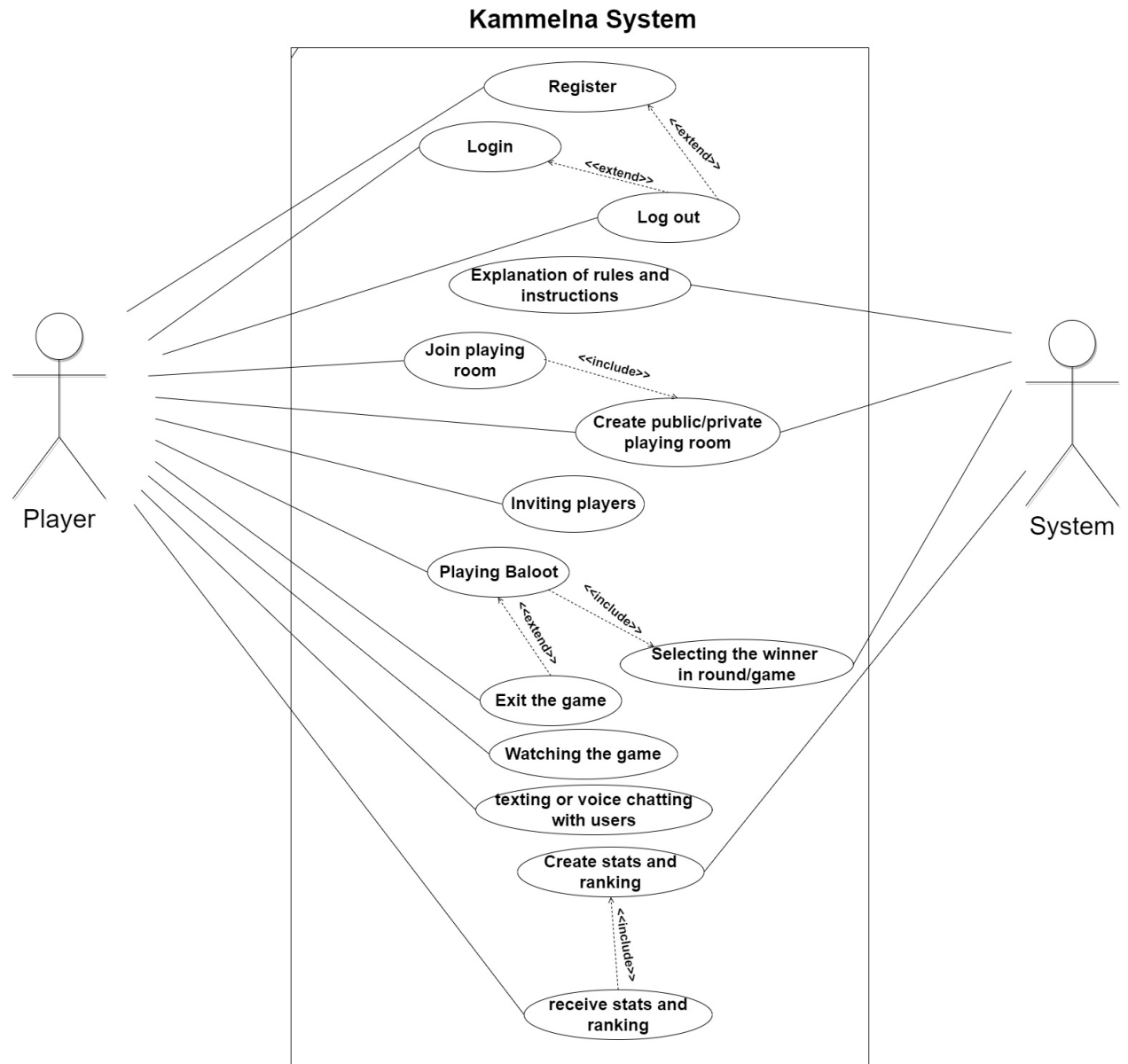
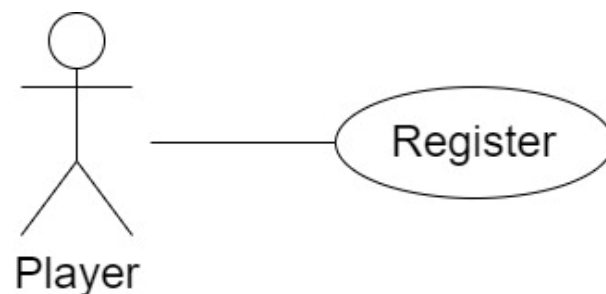


Table 1



Register	
Actors	Player
Description	If the user doesn't have an account, he/she cannot continue and play. The first step to continue in the app is "Register". To register there is important information needed.
Data	Email, Phone number, Username, Password
Stimulus	User command issued by Player.
Response	If the register process is done successfully, the app page goes to the main menu of the app. If the register process not done successfully, a message will show up to the users tells him/her to try again.
Comments	The user must fill all the data blanks.

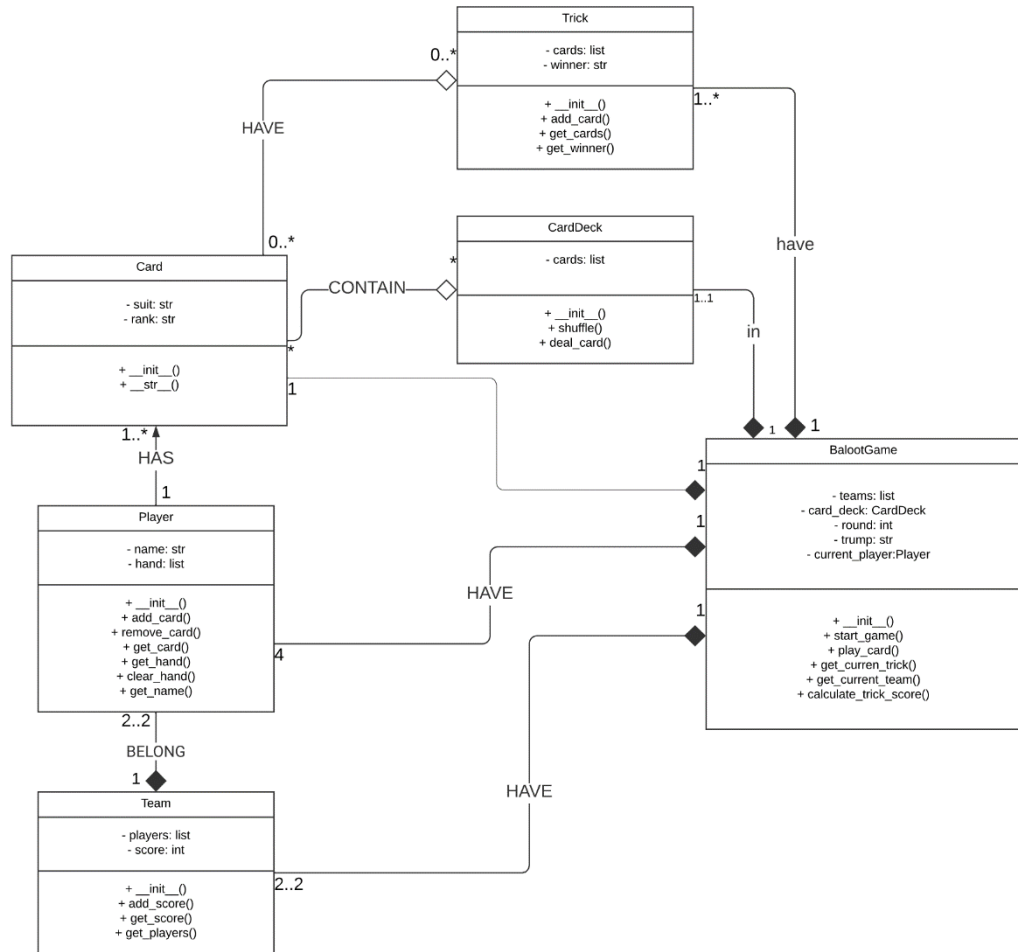
Table 2



Create public / private playing room

Actors	Player, System
Description	If the Player wants to play, there must be playing room to play in it. There are two types of playing rooms: 1-public, 2-private. The public playing room any player can join in it with or without invitation. The private playing rooms can't be joined unless the Player has invitation.
Data	Email, Phone number, Username, Password
Stimulus	User command issued by Player.
Response	Creating playing
Comments	The user must fill all the data blanks.

5-Class Diagram



6-Sequence Diagram

