

**CSC667**  
**Term Project**  
**Milestone 1 & 2**  
**Team F**

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## Milestone 1 : Web Application Concept and Wireframes

### Term Project Goal

### Specification

#### 1. Project specifications

##### a. Features

##### i. User Authentication

1. Create accounts for users.
2. Implement user login and logout functionality.

##### ii. Game Setup

1. Allow users to create a new Uno game.
2. Enable users to invite friends to join a game.
3. Provide options to set game rules, including the number of cards to start with and scoring rules.

##### iii. Real Time Chat (Required)

1. Enable real-time chat on the game creation page (home page after authentication).
2. Implement chat within each game room for users participating in a game.

##### iv. Game Logic

1. Implement game logic for Uno:
  - a. Dealing cards to players.
  - b. Managing the draw pile, discard pile, and player hands.
  - c. Enforcing game rules, for example matching colors or numbers.

##### v. Player Actions

1. Allow players to play cards from their hand.
2. Implement the ability to draw cards from the draw pile.
3. Enable players to “Uno” when they have one card left.

##### vi. Scoring and Winning

1. Calculate and display scores for each player.
2. Determine the winner when a player has no cards left.

##### vii. Multiplayer Support

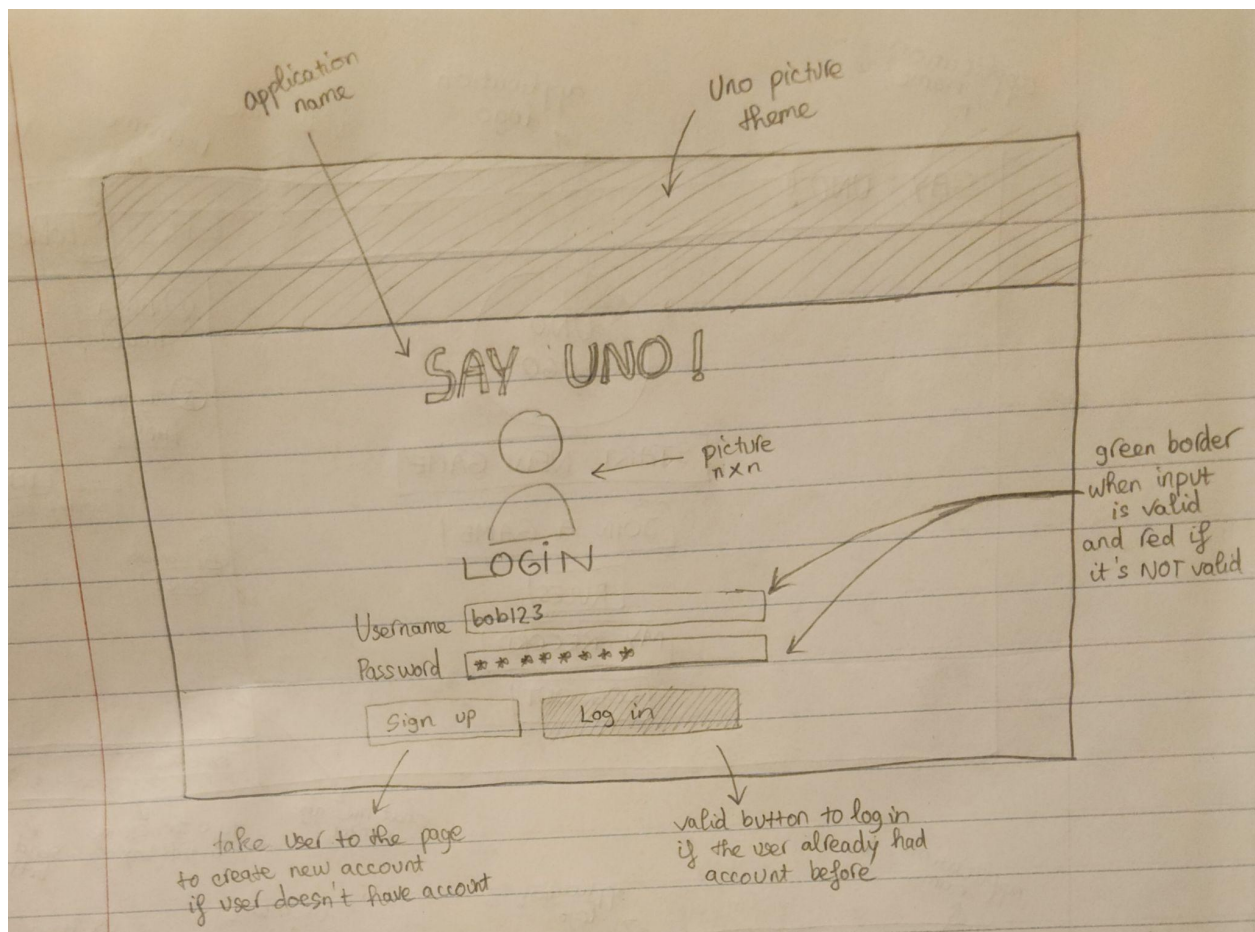
1. Support real-time gameplay with multiple players.
2. Implement chat functionality for communication among players.

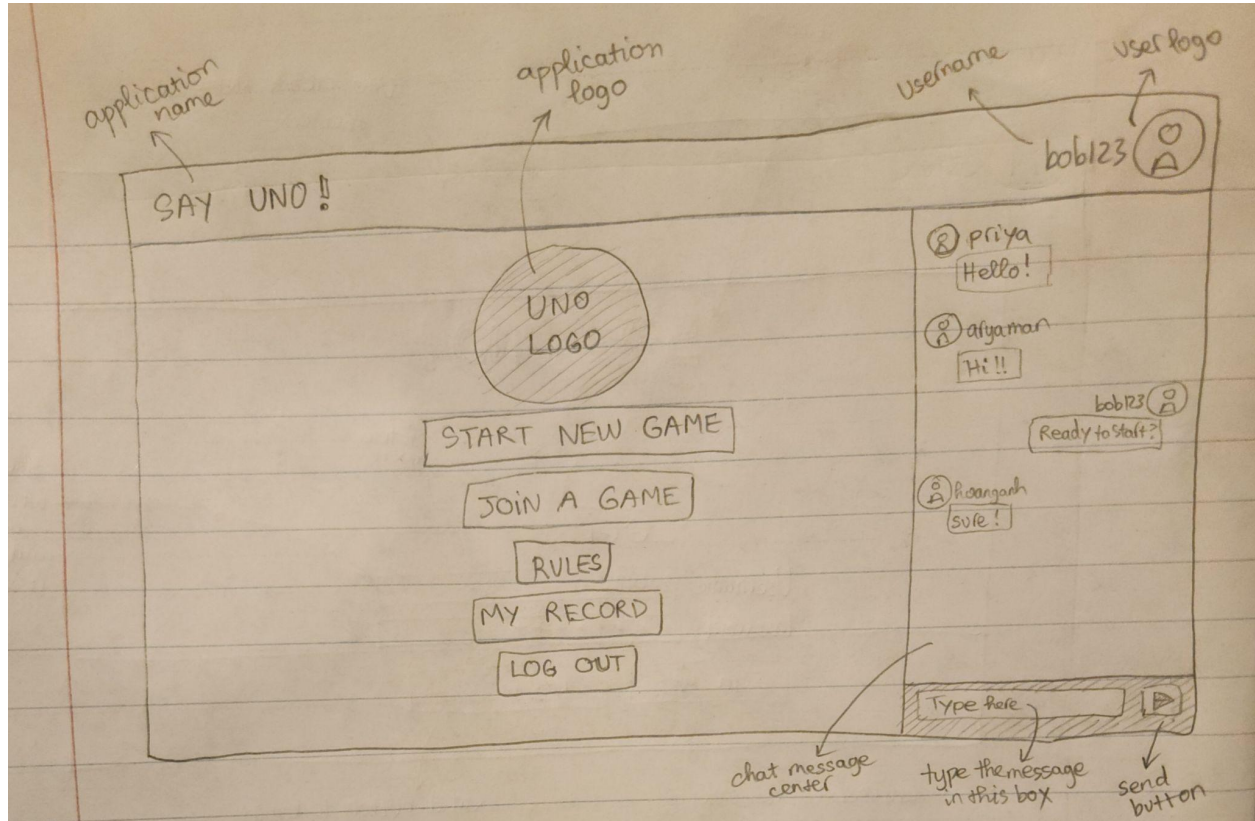
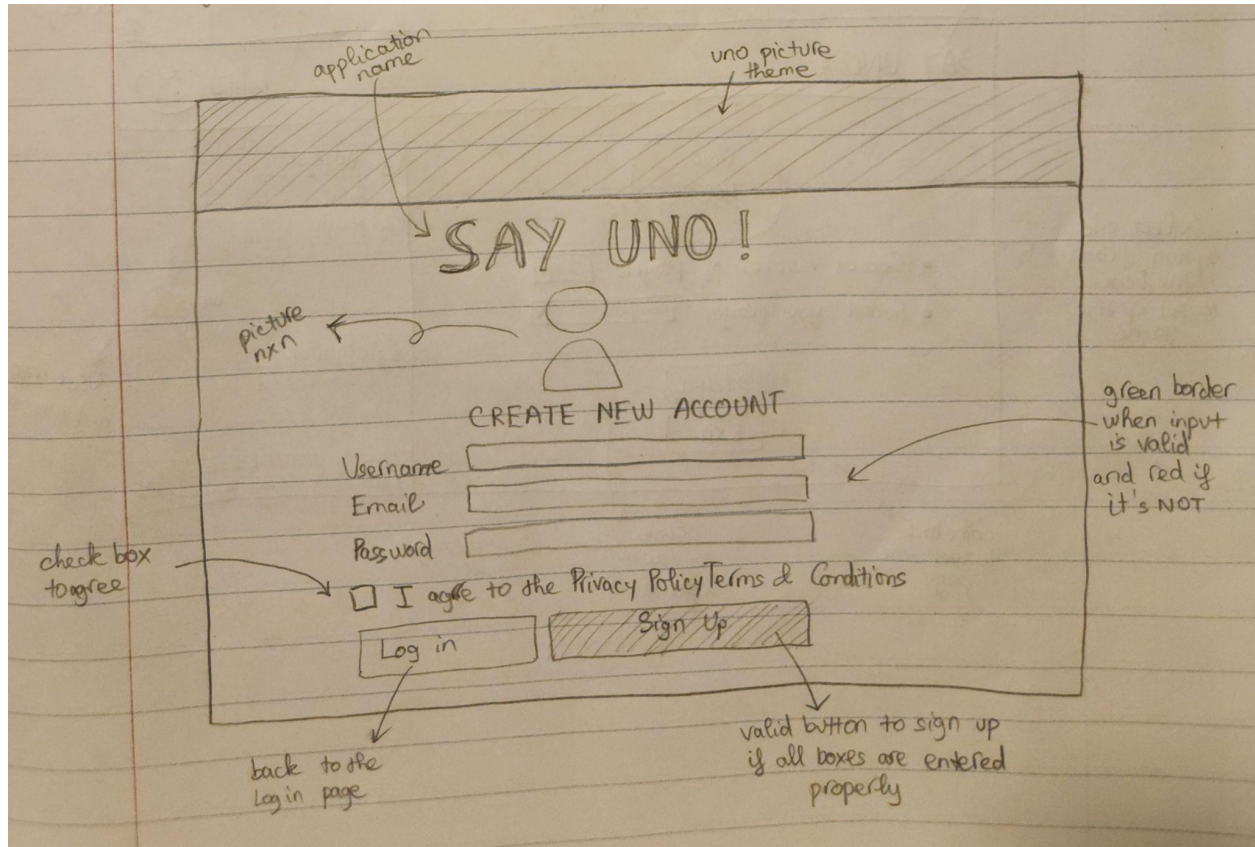
##### viii. Game State Management

1. Implement the ability to save and load game state, allowing players to continue their games later.

- ix. AI Opponents (optional)
  - 1. Implement computer-controlled opponents for single-player games.
- x. Game Notifications
  - 1. Notify players about game events, such as:
    - a. Their turn
    - b. Skipped turns
    - c. Draw cards
  - 2. User Profile and Statistics
  - 3. Display user profiles with gameplay statistics.
- b. Technologies
  - i. Render
  - ii. Node.js
  - iii. Express.js
  - iv. Postgres
- c. Development Process

## 2. Wireframes







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