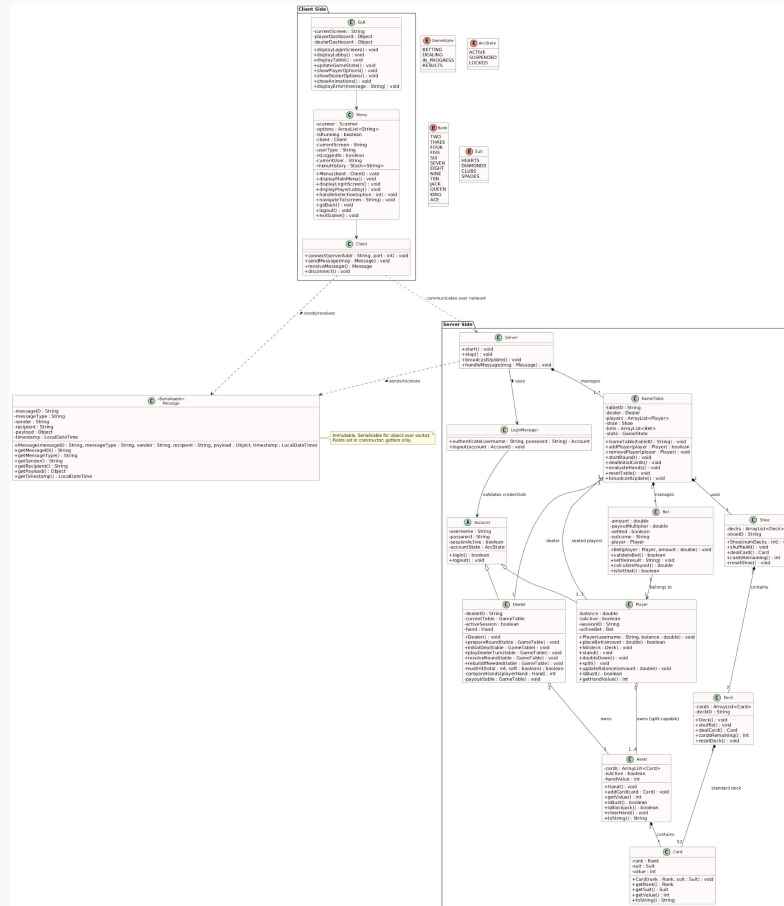


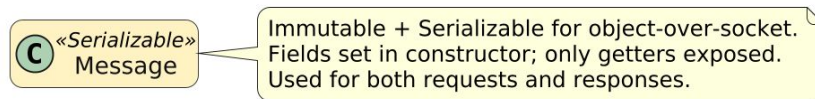
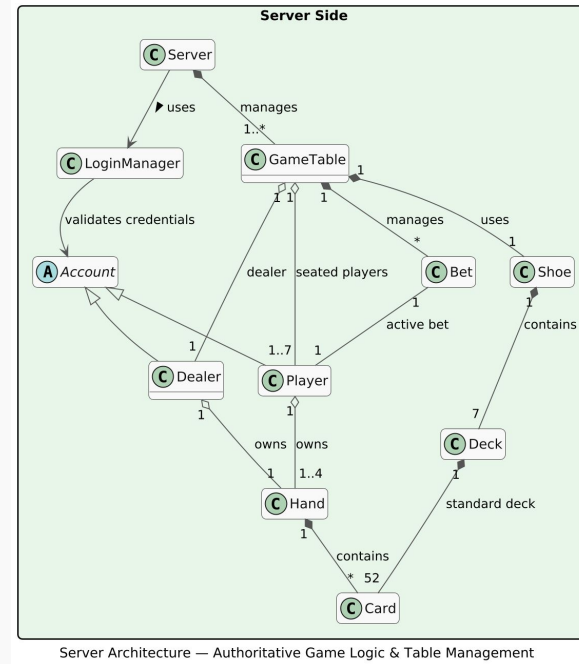
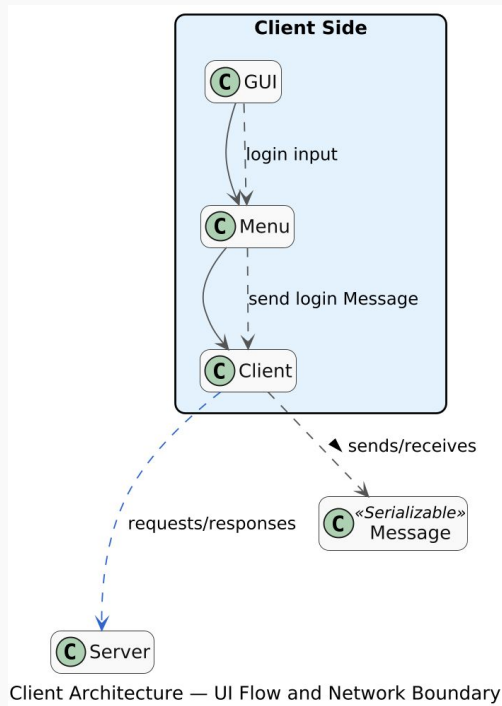
Multi-Player Blackjack

Blake, Rahul, Samuel



CLASS DIAGRAM



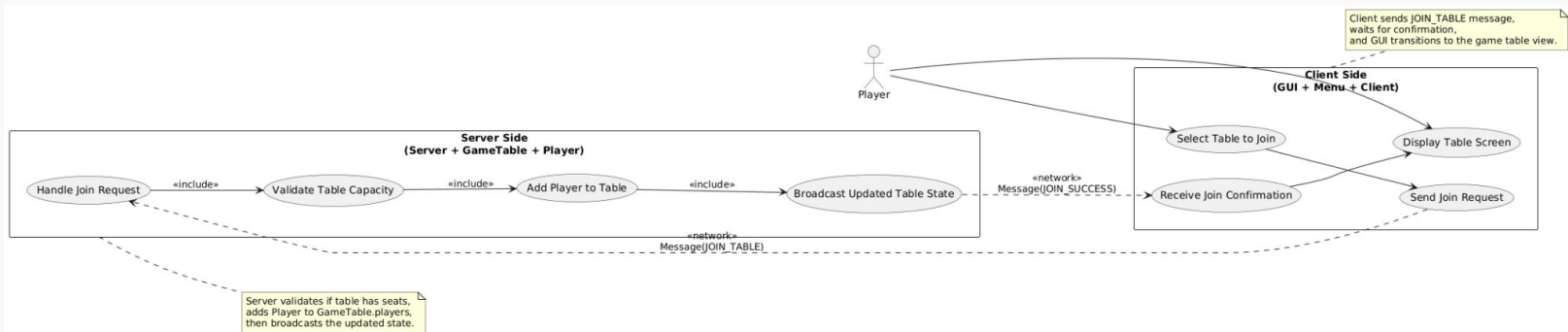
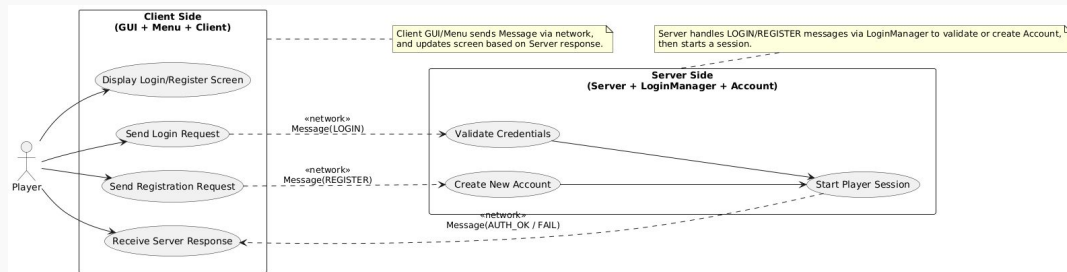


Shared Types — Serializable Message & Card Enums

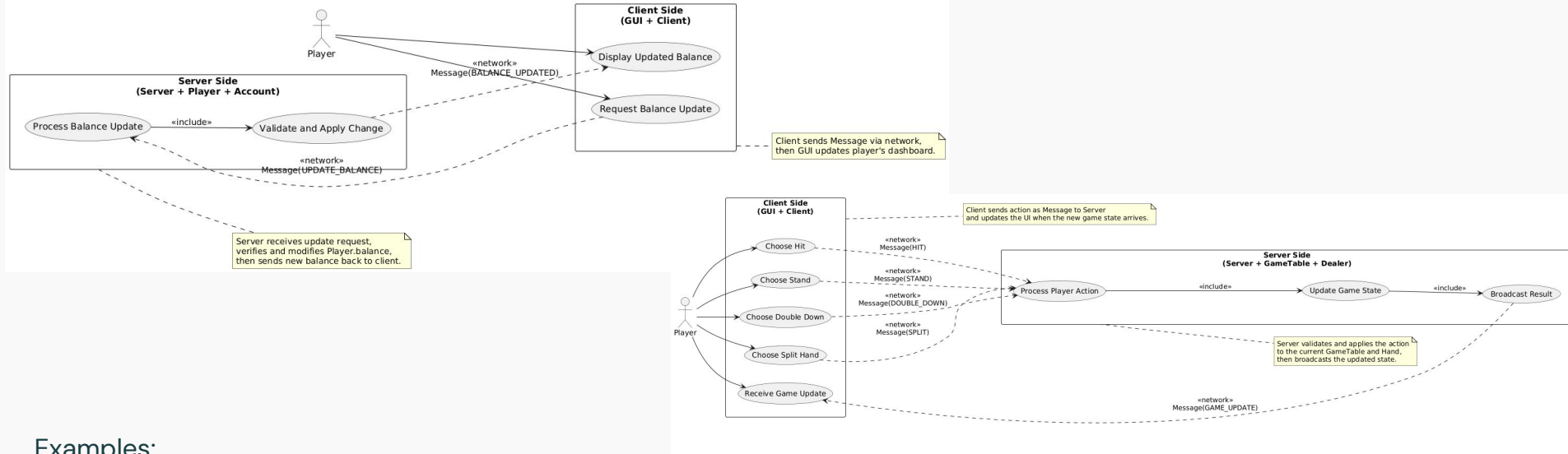
Use Cases

Examples:

- Player registers new account (creating a username, setting a password)
- Player logs in (by entering their credentials, able to access personal account)
- Player can manage their account (view profile, check balance)
- Table: Player can join a table (after logging in), browse open tables, view current players, can leave a joined table
- Betting moves: Player places an initial bet within limits, can adjust bet amount, clear bet entirely



Use Cases



Examples:

- Player wants to perform an action and either: hit (request another card, stand (keep current hand), or double down (double bet for one card)
- Player wants to check their profile
- Player wants to leave table between rounds, cash out chips, return to main lobby
- Player can log out of account, exit application securely with balance saved

Sequence Diagrams

- The sequence diagrams show the expected flow of the game for our use cases
- Shows the various interactions between the modules and how they communicate through message passing

Key Highlights:

- Player interactions: GUI captures user input and communicates with Client
- Client-Server communication: Client sends Message objects to Server, receives GameState updates back
- Server processing: Server handles authentication, game logic, and coordinates GameTable operations
- Real-time updates: Server broadcasts GameState to all clients at a table to keep everyone synchronized
- Dealer control: Dealer manages game flow (creating tables, starting rounds, dealing cards)



Project Timeline

Phase 1: Planning and Analysis (9/19–10/2)

- Project Kickoff: 9/19
- Requirements Gathering:
 - Functional Requirements: 9/20–9/23
 - Non-functional Requirements: 9/22–9/24
- Use Cases: 9/25–9/26
- Use Case Diagrams + Class Diagrams + Sequence Diagrams 9/26–10/2

Phase 2: Design(10/2–10/30)

- Editing Use Cases and CLass Diagrams: 10/6–10/10
- Talking about different classes(client,server,card,gui, etc): 10/14–10/24
 - Card,Client, Gui, Server classes 10/14
 - Player, Dealer, Deck classes 10/16
 - Menu, Client, Message classes 10/17
 - Login Manager, Game Table, Hand, Shoe Classes 10/20
 - Account, Bet Classes 10/24
- Finalizing slideshow: 10/27–10/30

Gantt Chart

[illegible]

Thanks!