Virtual Poker

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An analyzation of the function points for each function in the use case create room:

Function Type	Where It Occurs
External Input (EI)	- createRoom: Host provides roomName, password, and hostID - joinRoom: Player provides roomID, password, and playerID
External Output (EO)	 - createRoom: Returns success/fail plus the roomID - joinRoom: Returns a boolean or error - broadcastRoomUpdate: Sends a WebSocket message to other players
External Inquiry (EQ)	- None in this use case (no direct "request/response" without updating data).
Internal Logical File (ILF)	- createRoom: Inserts a new record into the Rooms table - joinRoom: Updates room membership data in the DB
External Interface File (EIF)	- None in this use case (no external file or third-party data needed).

1. createRoom

- Summary: Creates a new game room
 - \circ EI (simple) = 3
 - Host provides room name, optional password, and host ID; basic input
 - \circ ILF (average) = 10
 - Inserting a new record in the Rooms table; medium complexity since it involves DB interaction
 - \circ EO (simple) = 4
 - Returning success/fail plus the roomID.
- Total = 17

2. joinRoom

- Summary: Allows a player to join an existing room
 - \circ EI (simple) = 3
 - Player submits room ID, optional password, and player ID; basic input
 - \circ ILF (average) = 10
 - Updates internal DB to record the player in the room; medium complexity
 - \circ EO (simple) = 4
 - Returns true/false or throws an error
- Total = 17

3. broadcastRoomUpdate

• Summary: Notifies all players in the room via WebSockets when a new player joins.

- \circ EI (simple) = 3
 - Sends the playerID from new player to the server/host via WebSocket to send
- \circ ILF (average) = 10
 - Updates the playerID list for all players as new player join; medium complexity since it involves WebSocket and synchronization
- \circ EO (average) = 5
 - Broadcasting data to all connected players via WebSockets; moderate complexity since it involves WebSocket and synchronization
- Total = 18