**SEM 4 - RPPOOP - MINI PROJECT**

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* **PROJECT TOPIC:** BLACKJACK CARD GAME USING OOP CONCEPTS SUCH AS -

1. CLASSES AND OBJECTS
2. CONST FUNCTIONS
3. FRIEND FUNCTIONS
4. ACCESS SPECIFIERS
5. INHERITANCE
6. POLYMORPHISM
7. CONSTRUCTORS
8. DESTRUCTORS

* **PROGRAMMING LANGUAGE USED:** C++
* **PROGRAM CLASSES ARE AS FOLLOWS:**

1. **CLASS CARD:** DEFINES A CARD: [SUIT / RANK / IF FACE UP]
2. **CLASS HAND:** DEFINES CURRENT HAND OF A PLAYER OR HOUSE IN A GAME
3. **CLASS GENERIC PLAYER:** DEFINES PLAYER OR HOUSE FUNCTIONS
4. **CLASS PLAYER:** EXTENDS FUNCTIONS OF GENERIC PLAYER TO DEFINE GAME FOR USER
5. **CLASS HOUSE:** EXTENDS FUNCTIONS OF GENERIC PLAYER TO DEFINE GAME FOR AI
6. **CLASS DECK:** EXTENDS FUNCTIONS OF CLASS HAND TO DEFINE DECK AND PROVIDE RANDOM CARD TO PLAYERS
7. **CLASS GAME:** FUNCTIONALITY DEFINES HOW THE GAME WORKS

* **INHERITANCE HAS BEEN DONE AS FOLLOWS**:

CLASS HAND

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CLASS DECK CLASS GENRIC PLAYER

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CLASS PLAYER CLASS HOUSE

* **GAME RULES, EXECUTION AND OUTPUT SCREENSHOTS:** 

