Final Project Proposal

My idea for my final project is a hangman application. A menu will ask the user if they want to continue to the game or exit. If the user selects continue then the application will offer the user a clue to solve the hangman puzzle. This will be done in conjunction with a while loop. After the letter the user user, the application will tell the user if the letter they selected is part of the puzzle. This will be done in conjunction with a switch loop. After the user enters all of the necessary guesses, the application will tell the user if they solved the puzzle or not. If the user did not solve the puzzle correctly, then the program will give the solution. If the user did solve the puzzle correctly, the program will respond appropriately.

```
                         ┌─────────────────────┐
                         │  Application start  │
                         └─────────────────────┘
                                   │
                         ┌─────────────────────┐
                         │  Application menu   │
                         └─────────────────────┘
                          │                  │
              ┌───────────────────┐   ┌───────────────────┐
              │  User selects     │   │ User selects exit │
              │  continue         │   └───────────────────┘
              └───────────────────┘            │
                       │               ┌───────────────────┐
              ┌───────────────────┐    │ Application ends  │
              │  Game clue is     │    └───────────────────┘
              │  given to the user│
              └───────────────────┘
                       │
              ┌───────────────────┐
              │  User enters 5    │
              │  diferent letters │
              └───────────────────┘
                       │
              ┌───────────────────┐
              │  Validation of the│
              │  5 user entered   │
              │  letters          │
              └───────────────────┘
                   │           │
        ┌──────────────────┐ ┌──────────────────┐
        │ If user's guesses│ │ If the user's    │
        │ are incorrect    │ │ guesses are      │
        └──────────────────┘ │ correct          │
                 │           └──────────────────┘
        ┌──────────────────┐          │
        │ User is informed │ ┌──────────────────┐
        │ that they did not│ │ User is informed │
        │ solve the puzzle │ │ that they solved │
        └──────────────────┘ │ the puzzle       │
                 │           └──────────────────┘
        ┌──────────────────┐          │
        │ Displays the     │ ┌──────────────────┐
        │ answer to the    │ │ Game is over and │
        │ puzzle to the user│ │ exits            │
        └──────────────────┘ └──────────────────┘
                 │
        ┌──────────────────┐
        │ Game is over and │
        │ exits            │
        └──────────────────┘
```