Team 2 Project 3 Requirements Documentation

Task Overview

Requirement ID	Description	Story Points	Priority	Sprint No.
1- Chess GUI Design	Create a GUI with the intended pieces and board with active updates as pieces are moved and eliminated.	13	16	2
2- Chess Board Design	Create a class to store and move chess pieces on	3	1	1
3- Chess Logic Design	Add a service class design for each entity including king, queen, rook, bishop, knight, pawn, board.	8	2	1
4- Game End Logic	Add logic for being in check, game ending in checkmate, etc.	1	12	1
5- User Role and Entity	Add base classes for users, player 1, player 2, along with service classes to manipulate entities such as king, queen, rook, bishop, knight, pawn, board.	5	3	1
6- King Chess Piece Object	Contains logic to determine valid moves for the King piece	2	4	1
7- Queen Chess Piece Object	Contains logic to determine valid moves for the Queen piece	2	5	1
8- Rook Chess Piece Object	Contains logic to determine valid moves for the Rook piece	2	6	1
9- Bishop Chess Piece Object	Contains logic to determine valid moves for the Bishop piece	2	7	1
10- Knight Chess Piece Object	Contains logic to determine valid moves for the Knight piece	2	8	1
11- Pawn Chess Piece Object	Contains logic to determine valid moves for the Pawn piece	2	9	1
12- Special Move: En Passant	Contains logic for the rare and exceedingly powerful en passant move.	3	13	1
13- Special Move: Castling	Contains logic for castling, when it is available, when it is blocked by check, and long vs. Short castling	5	14	1
14- Capture piece	Logic to detect and handle the capture of a piece	2	11	1
15- Pawn transformation	Logic to detect when a pawn reaches the opposite side of the board and allows it to become another piece	3	15	1

16- Move detection/display	When a piece is selected, determines and displays the possible moves that that piece can make	13	10	2
17- Power Chess Mode	Options and selection availability for the new game mode, power chess. In this mode, players can collect power-ups to give bonus abilities to their pieces.	5	17	3
18- Power Chess Power-ups	Class object for the power-ups, which need to have functions to be placed on the board randomly, be collected by pieces, and unlock special powers for each unique piece to claim a power-up.	13	18	3
19- Power-Up: King	Adds rules and abilities for the power-up that is gained when the King piece is to collect it.	5	19	3
20- Power-Up: Queen	Adds rules and abilities for the power-up that is gained when the Queen piece is to collect it.	5	20	3
21- Power-Up: Rook	Adds rules and abilities for the power-up that is gained when the Rook piece is to collect it.	5	21	3
22- Power-Up: Bishop	Adds rules and abilities for the power-up that is gained when the Bishop piece is to collect it.	5	22	3
23- Power-Up: Knight	Adds rules and abilities for the power-up that is gained when the Knight piece is to collect it.	5	23	3
24- Power-Up: Pawn	Adds rules and abilities for the power-up that is gained when the Pawn piece is to collect it.	5	24	3