Team: Ameya Bahirat, Ben Droste, Pete Mcpadden

Title: Kings and Creatures

Project Summary: A Dungeons and Dragons-esque software that allows you to have an interface for playing the game. The players can create characters that are different classes. The Dungeon Master can create enemies, move characters around using a UI, turn order and combat outcomes are decided by dice rolls.

Project Requirements:

Business Requirements

ID	Requirement	Topic Area	Actor	Priority
BR-001	If a session is private. A password must be supplied to enter.	Game Integrity	Session	Medium
BR-002	Users must not be able to use Dungeon Master (DM) controls if they are not the DM	Game Integrity	User Roles	High

User Requirements

ID	Requirement	Topic Area	Actor	Priority
US-001	DM should be able to create a scenario with NPCs, Rooms, and Enemies	Scenario Editing	DM	High
US-002	DM should be able to use automatic dice roll to generate turn order, and advance turns.	DM control	DM	High
US-003	DM should be able to trigger combat between a user and an enemy	DM control/npc attack	DM	High
US-004	Players can initiate combat on their turn	Player control/player attack	User	High
US-005	On combats the computer should display to users precalculated success minimum,	User Info	User	High

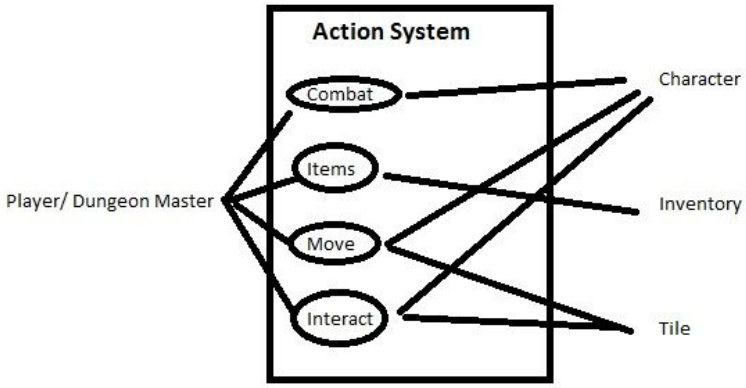
	and current dice roll(s)			
US-006	Players should be able to initiate trade with NPC characters and other players	Player Control	User	High
US-007	Dungeon Master should be able to generate new room when players decide to move out of the current room	DM Control	DM	High

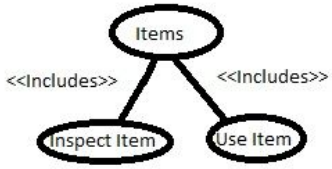
Non-Functional Requirements

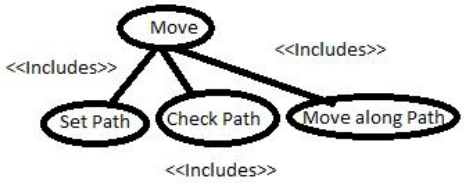
ID	Requirement	Topic Area	Actor	Priority
NF-001	Update time when DM places enemies down on grid should be <1s	Performance	Users	High
NF-002	UI for each player should display moves by each player with as little delay as possible	Performance	Users	High
NF-003	UI for DM should give easy access to hazards/enemies that need to be spawned	Usability	DM	High
NF-004	Hidden enemies/hazards placed by DM should be displayed to players either by DM or when players step on square in <1s	Performance/ Usability	Users	High

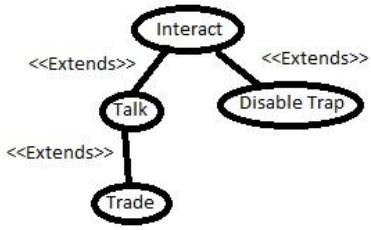
Data Storage:
Session information, including character information and inventories will be stored in a database. Character information will be stored after character creation, and inventories will be updated once a session period has ended. The entries will be removed if the session is deleted.

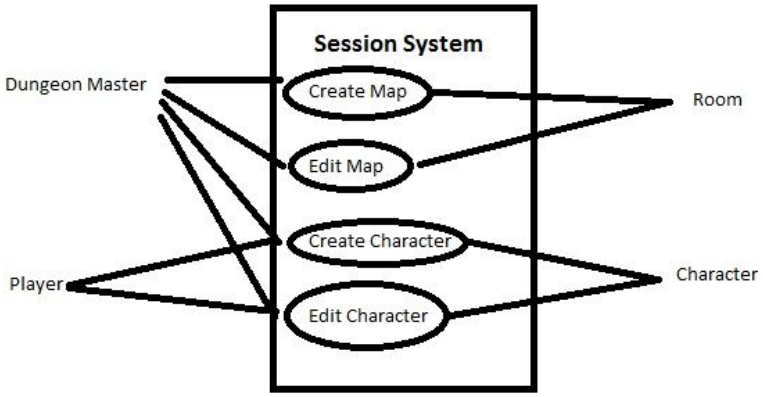
User Diagrams/Sub-Diagrams:

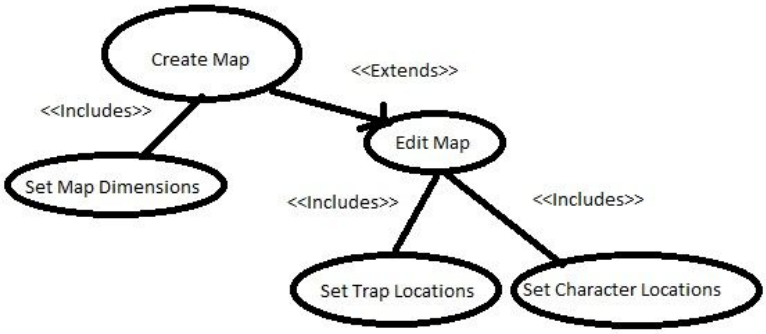


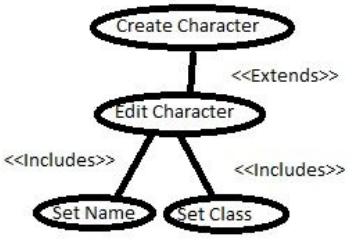







Session System
Dungeon Master
Create Map
Edit Map
Create Character
Edit Character
Player
Room
Character


Create Map
<<Extends>>
<<Includes>>
Edit Map
Set Map Dimensions
<<Includes>>
<<Includes>>
Set Trap Locations
Set Character Locations


Create Character
<<Extends>>
Edit Character
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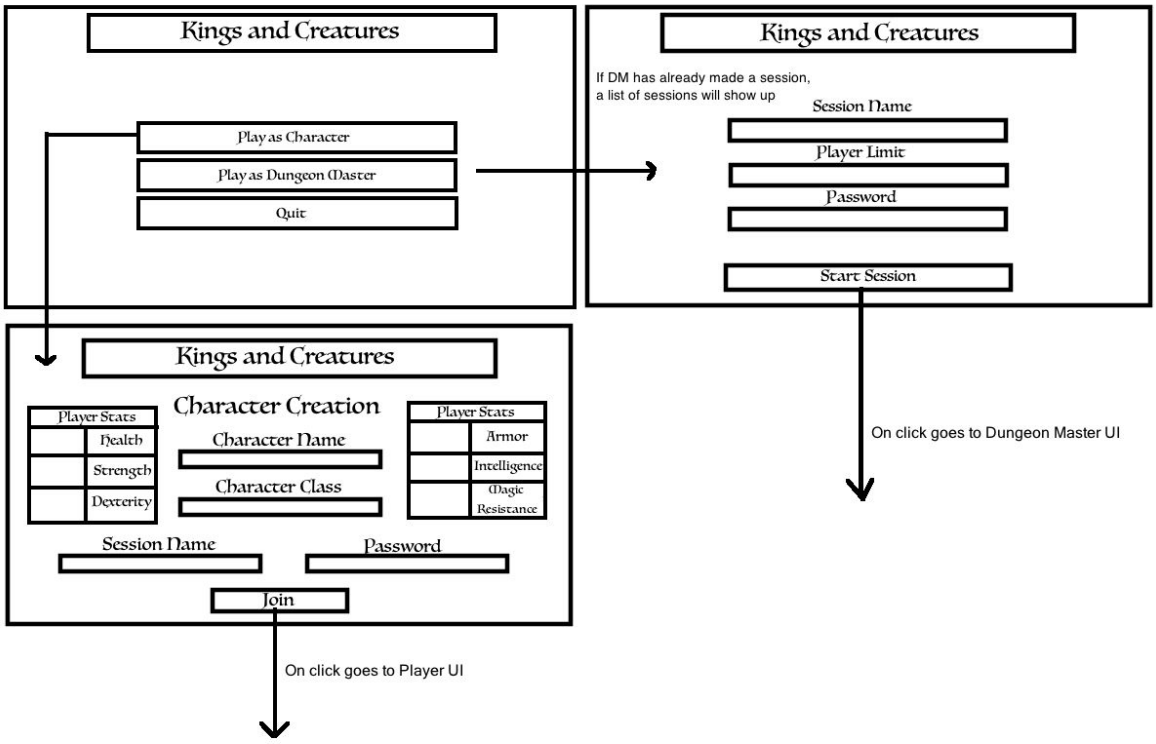
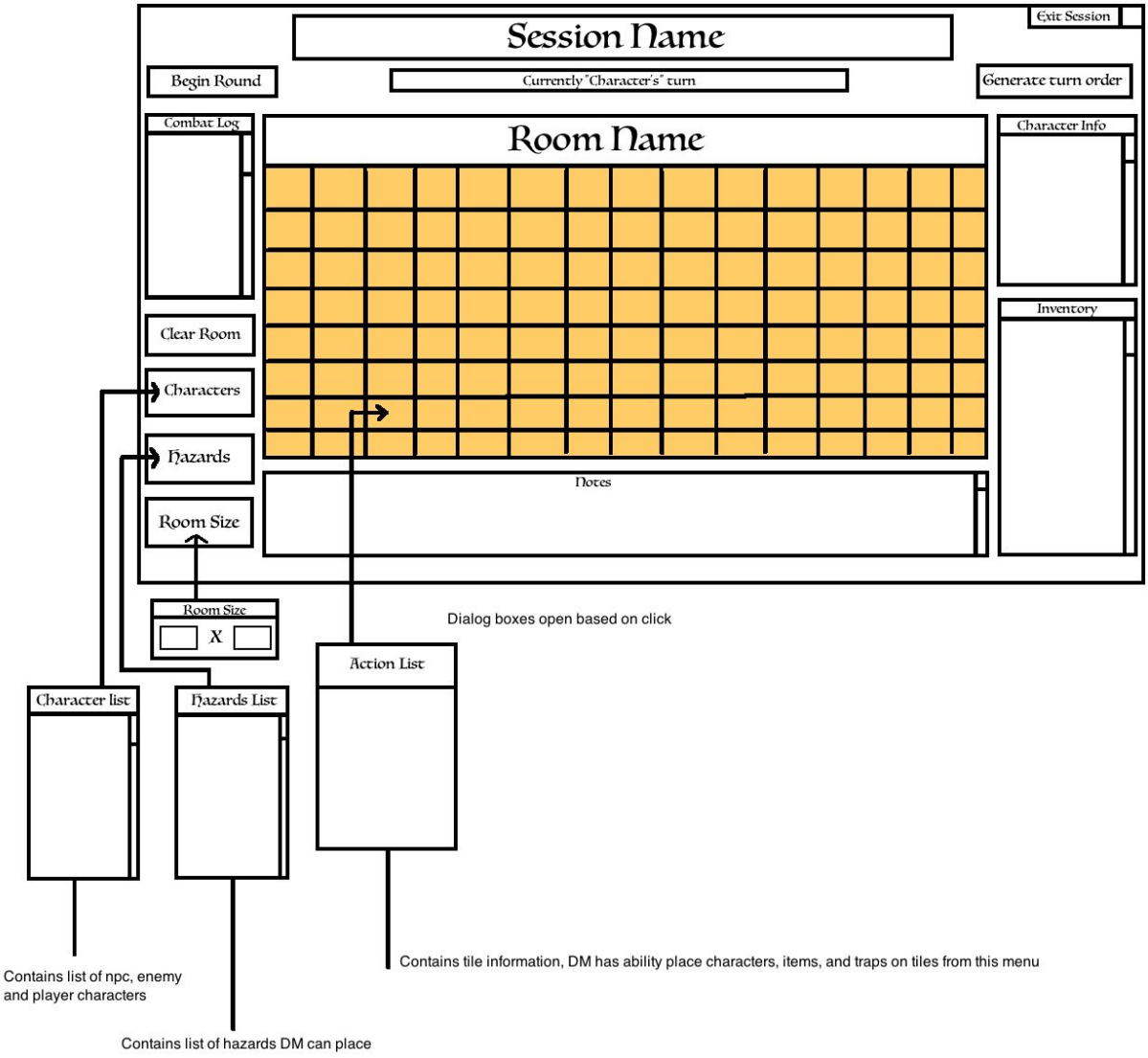
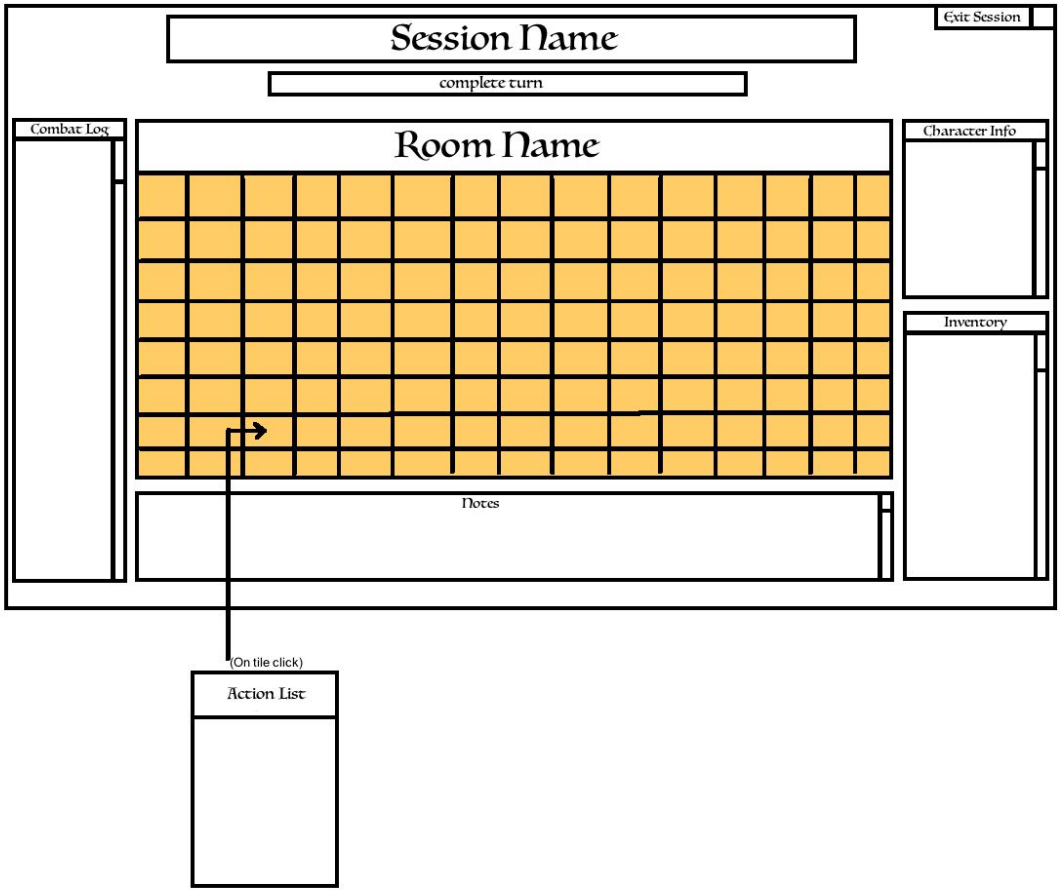
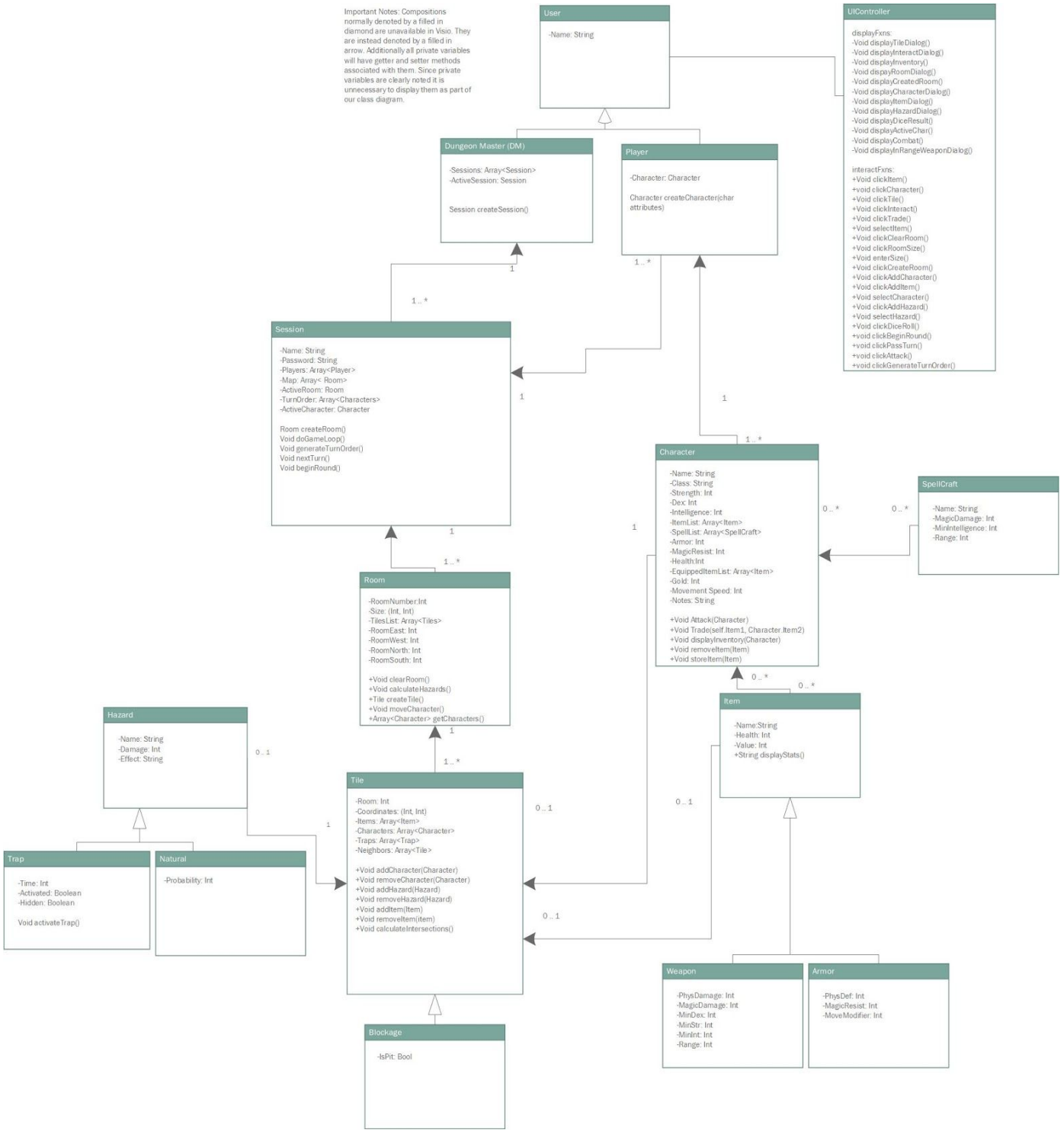
<<Includes>>
Set Name
Set Class

UI Mockups:


Kings and Creatures
Play as Character
Play as Dungeon Master
Quit
Kings and Creatures
If DM has already made a session,
a list of sessions will show up
Session Name
Player Limit
Password
Start Session
On click goes to Dungeon Master UI
Kings and Creatures
Character Creation
Player Stats
Health
Strength
Dexterity
Character Name
Character Class
Player Stats
Armor
Intelligence
Magic Resistance
Session Name
Password
Join
On click goes to Player UI


Session Name
Exit Session
Begin Round
Currently "Character's" turn
Generate turn order
Combat Log
Room Name
Character Info
Inventory
Clear Room
Characters
Hazards
Room Size
Notes
Room Size
X
Dialog boxes open based on click
Action List
Character list
Hazards List
Contains list of npc, enemy and player characters
Contains list of hazards DM can place
Contains tile information, DM has ability place characters, items, and traps on tiles from this menu



Contains actions player can do (e.g. move, attack character, etc)

Class Diagram: