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CS 386 Final Project

https://github.com/LugwellDR/CS386\_TeamAvatar

**D.3 Analysis**

CS36 Software Engineering

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Dr. Marco Gerosa

**1. Description:**

*The following paragraphs should describe the features of our system. (Descriptions should be consistent with D.2 Stakeholders, requirements, use case, and user stories. Refine as needed.)*

*Use -***Bold-** *for a noun that is a class in our model.*

*Use -Italic- for a noun that is an attribute in our model.*

*Use -Underlined- for noun/verb that is an association in our model.*

The Dungeons and Companion app will solve the problem of not being organized when it comes to campaign materials for both players and game masters. The product will provide a centralized resource that contains a variety of tools and functions to ease of playing D&D. This app in particular will allow players of role playing games to access reference information as well as a way to aid in the creation of characters, gameplay and campaign creation.

The D&C app will contain many features. The main **interface** will act as a hub for the players and have tabs for the other functions within the program. The first tab will be called **Source Material**. This section will include *Dungeon and Dragons’ books and blank character sheets.* They can come from any version but the app will focus on material from 5e. The user will be able to view the material on the app. The next tab on the main interface will be **Personal Sheet.**  It will extend the character sheets material from the source tab. The user will be able to create character, view a character, and delete a character. Real edits to a personal character sheet will be able to be edited in real time. The dungeon master for a game session will eventually be able to see the character sheets of all players. The next tab will be **Game.** Game will just be a way for a user to connect to a certain game with their friends. This allows for the user to connect to the message board as well. Functionality may be extended in the game tab to allow the dungeon master to manage a map of the game which all players can see. The next tab will be **Dice.** The tool will have the option to randomly roll dice and save the result to the user. Dice available to the user will be standard for Dungeons and Dragons: 2-side, 4-side, 6-side, 8-side, 10-side, 12-side, 20-side, and percentile dice. Additionally, players will be able to roll multiples of any given die at a time.

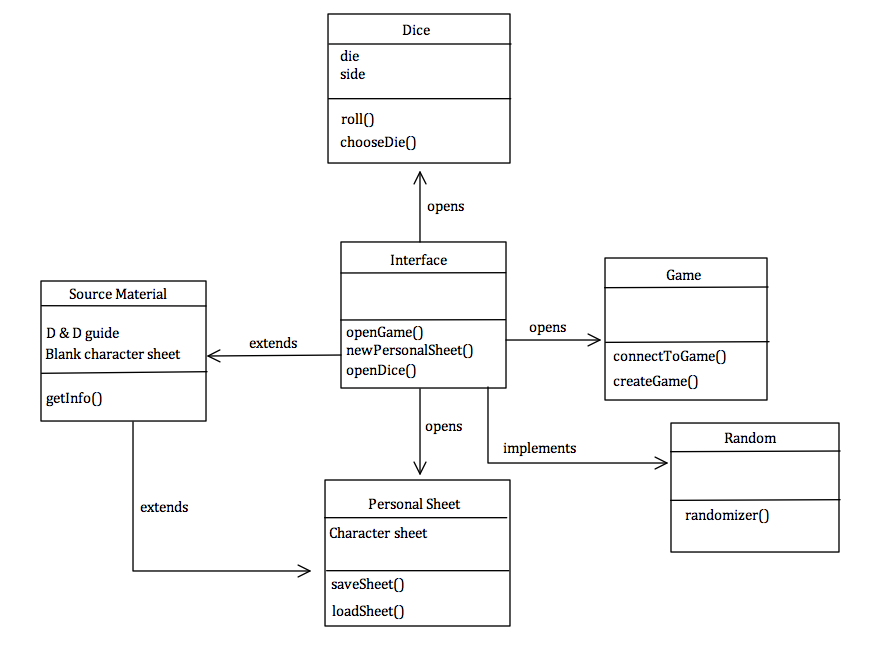
A hidden class needs to be included that is called **Random**. This will handle all the random variables throughout the app. This class will be used by the system as a whole, largely for rolling dice or other random character stats.

**2. Model:**

*Provide conceptual model of our systems as a UML class diagram.*

*Represent proper cardinalities for all associations.*

*Include association names and filled arrows to indicate the direction of the relationships.*

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**Group Participation:**

Joseph Eppinger: 20%, Assisted with writing the first section.

Jake Farrar: 20%, Jake contributed to writing section one.

Remy Brandriff: 20%, UML class diagram.

Jacob Lemon: 20% contributed to the UML diagram.

Justin Shaner: 20% created the front page and contributed to the written section.