CharacterSmith3.5e

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DUNGEONS & DRAGONS

Quick Recap

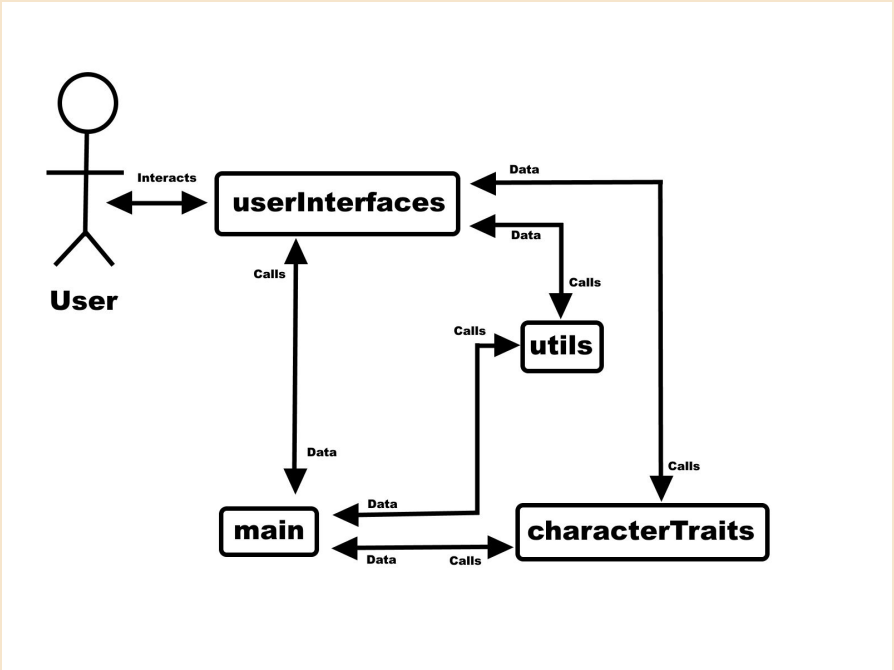
- D&D 3.5e Character Creator
- Downloadable Java Application
- Add functionalities to assist DMs with quickly creating NPCs

System Overview

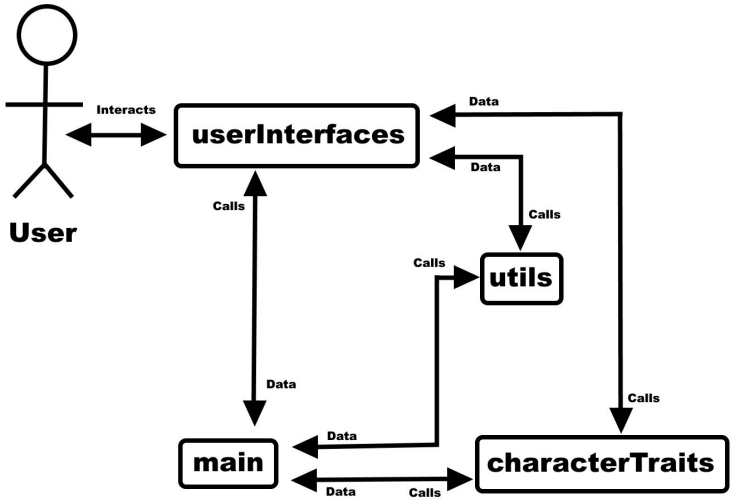
- Use D&D3.5e character creation to model the system
- Consists of a user interface allowing interaction between the user and the application
- Functions locally and offline

System Components & Actors

- Four types of components (packages):
    1. User Interfaces
    2. Utils
    3. The main package
    4. Character Traits
- Only one type of Actor:
    - User



Architectural Style



- Three Tiered Architecture
  - GUI -> Functional Layer -> Stored information
- Reasons
  - Simplicity
  - GUI relies on backend layers for calculations/functionality
  - Assists in increasing legibility for first time user

Design Patterns

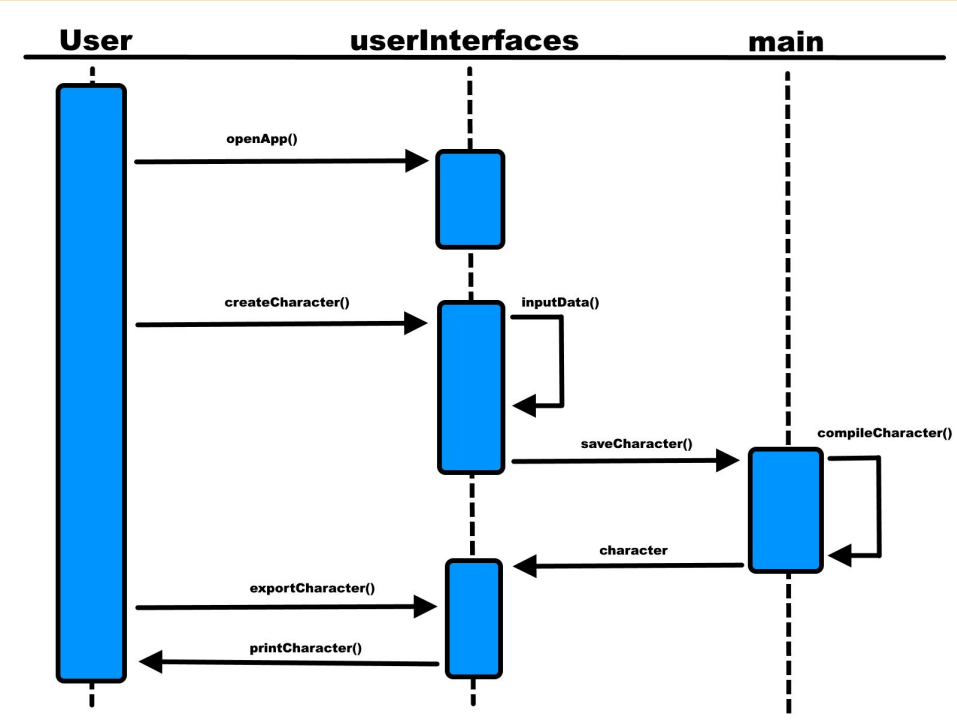
Chosen design patterns:

- Factory method
  - Created multiple similar classes with the same interfaces
  - Used objects in order to store instances of data
- Façade method
  - Presented with a simple and straightforward interface
  - Contained several complex subsystems within the software

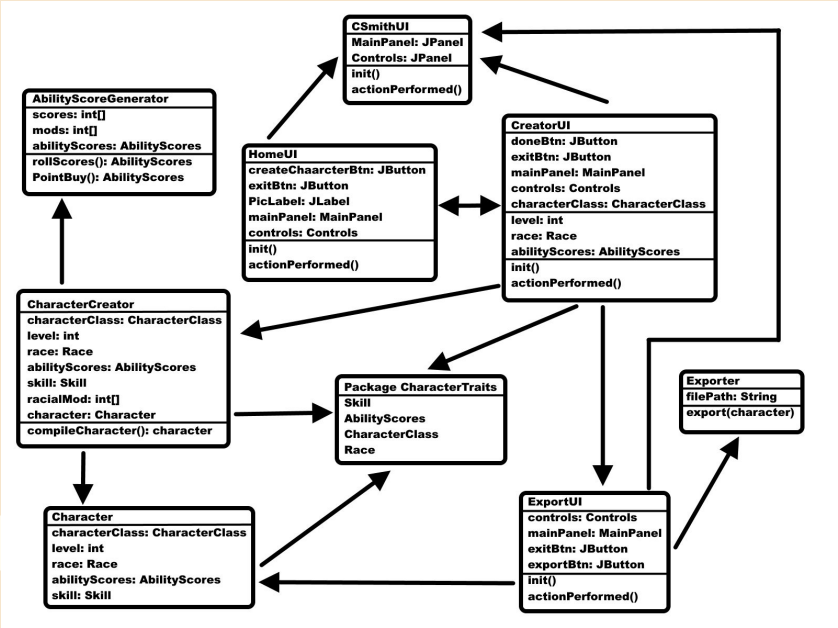
Framework

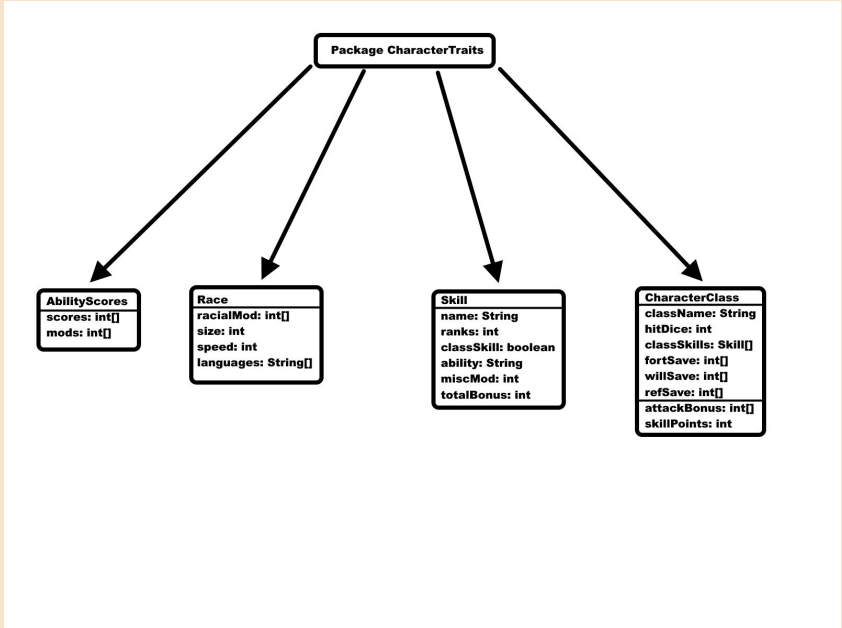
- Java Swing Application Framework
- Simple to use
- Libraries are included in base java installations
- Allows entire application to be coded in and run using java

Sequence Diagram



Class Diagram





Project Prototype

Github Link

https://github.com/jsb288/CSC431-Project.git