



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



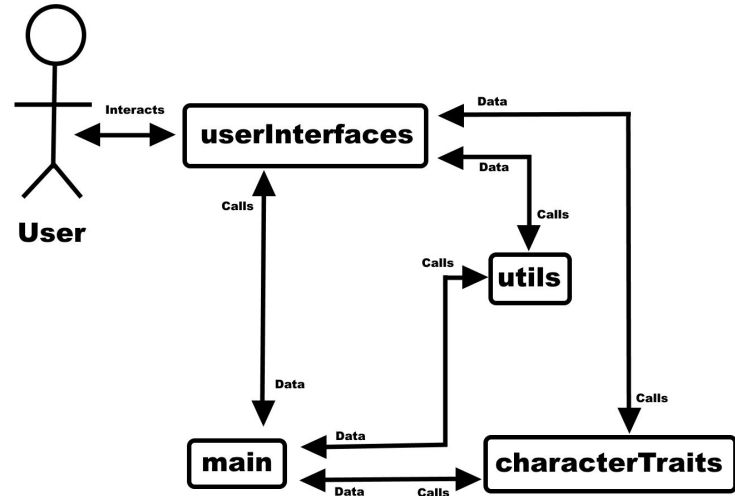
The background is a light beige parchment scroll with a dark, irregular border. In the top left corner, there are four small black bird silhouettes in flight. In the top right corner, there is a white silhouette of a mountain peak. In the bottom right corner, there is a single small black bird silhouette. The title 'System Overview' is centered at the top in a large, black, serif font.

System Overview

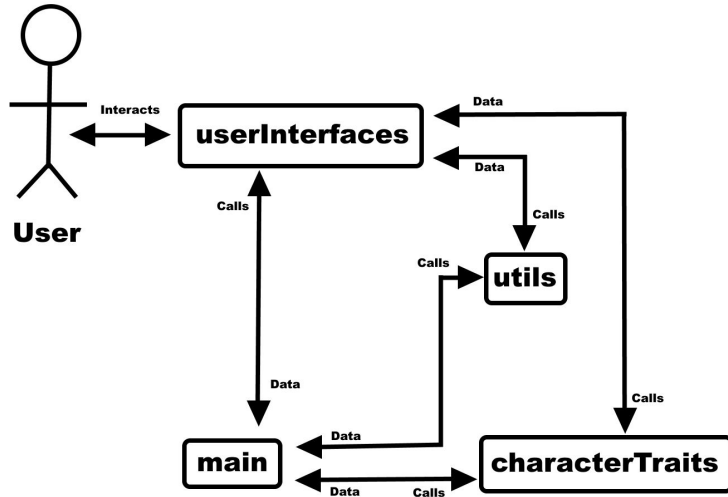
- Use D&D3.5e character creation to model the system
- Consists of a user interface allowing interaction between the user and the application
- Functions locally and offline

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:

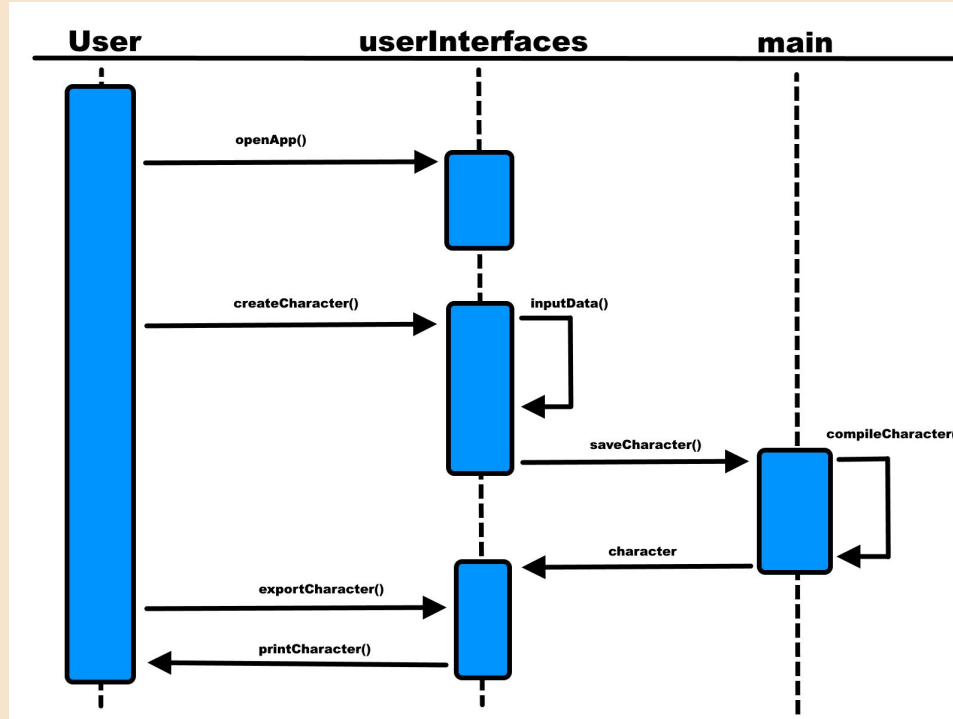
- Factory method
 - Created multiple similar classes with the same interfaces
 - Used objects in order to store instances of data
- Façade method
 - Presented with a simple and straightforward interface
 - Contained several complex subsystems within the software

Framework

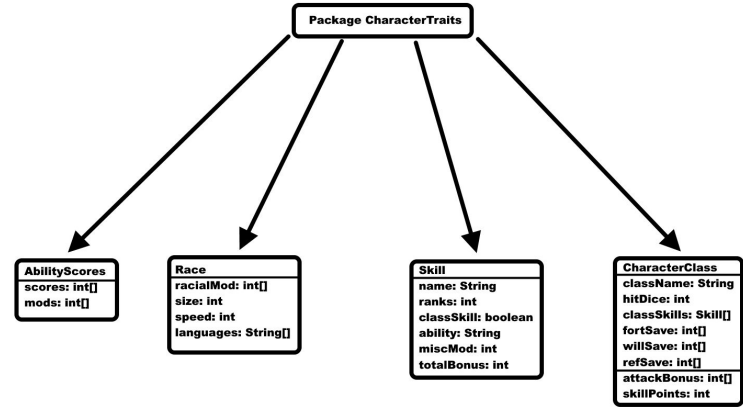
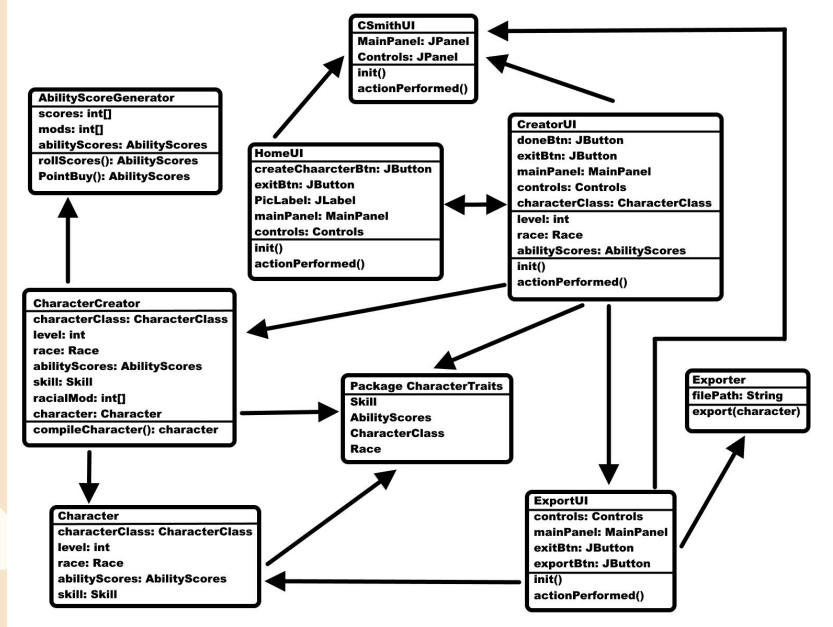
- Java Swing Application Framework
- Simple to use
- Libraries are included in base java installations
- Allows entire application to be coded in and run using java



Sequence Diagram



Class Diagram



Project Prototype



Github Link

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

