



CSC 431

CharacterSmith3.5e

Software Requirements Specification (SRS)

Team #12

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Version History

Version	Date	Author(s)	Change Comments
1.0	2/20/22	Alex Madarese Nathan Fitzpatrick Jefferson Boyd	First Draft
2.0	4/18/22	Nathan Fitzpatrick	Updated Diagrams and removed incorrect non-functional requirements

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1. System Requirements

1.1 Functional Requirements

1.1.1 Open Character Creation Menu

Title	Open Character Creation Menu
Description	The character creation menu is where all character choices will be made
Priority	Mandatory: 0
Precondition(s)	User must have chosen to begin character creation
Basic Flow	<ul style="list-style-type: none">• User will be brought to menu in which all character details can be decided• At end will be option to view final character sheet
Postconditions(s)	User is in character creation menu

1.1.2 Pick Character Class

Title	Pick Character Class
Description	Users are prompted with a list of class choices
Priority	Mandatory: 0
Precondition(s)	User must be in the Character Creation Menu
Basic Flow	<ul style="list-style-type: none">• User opens application• User chooses create a custom character• User is prompted with selectable classes• User chooses a desired class to continue their character creation• The randomize feature is also present
Postconditions(s)	Trait is saved to character

1.1.3 Pick Character Level

Title	Pick Character Level
Description	Users are prompted to choose a level of their custom character
Priority	Mandatory: 0
Precondition(s)	User must be in the Character Creation Menu
Basic Flow	<ul style="list-style-type: none">• User is prompted with a level selector decision• User selects the desired level of their character to continue their character creation• The randomize feature is also present
Postconditions(s)	Trait is saved to character

1.1.4 Choose Attribute

Title	Choose attribute
Description	Users are prompted to choose attributes for their custom character
Priority	Mandatory: 0
Precondition(s)	User must be in the Character Creation Menu, User has selected character level and class
Basic Flow	<ul style="list-style-type: none">• User is prompted with selectable attributes• User selects the desired attribute for their character to continue their character creation
Postconditions(s)	Trait is saved to character

1.1.5 Randomize Attribute

Title	Randomize Attribute
Description	User selects the "randomize attribute button" to have the program choose a random option for a selected attribute
Priority	Very Important: 1
Precondition(s)	User must be in the Character Creation Menu, User has selected character level and class
Basic Flow	<ul style="list-style-type: none">• User selects the "randomize attribute button"• A random option from a list of valid attributes is chosen by the program• The randomly chosen option is returned to the user
Postconditions(s)	Trait is saved to character

1.1.6 Skill Leveler

Title	Skill Leveler
Description	Takes user through process of leveling up skills
Priority	Very Important: 1
Precondition(s)	User must be in character creation menu, User has selected character level and class, User has selected attributes
Basic Flow	<ul style="list-style-type: none">• User is shown list of skills• User is told their skill points available• User can allocate skill points to different skills• Skills are saved to character
Postconditions(s)	Trait is saved to character

1.1.7 View Final Character

Title	View final Character
Description	Takes user to final gui where they can review the final details of their character

Priority	Mandatory: 0
Precondition(s)	User must be in the Character Creation Menu, User has selected character level and class
Basic Flow	<ul style="list-style-type: none"> • User is in character creation menu • User selects "View final character" • A character sheet for the character is shown on screen • Option to export character will be present on screen
Postconditions(s)	Opens final character view

1.1.8 Export Final Character

Title	Export Final Character
Description	Gives the user the ability to export their fully created character.
Priority	Important: 2
Precondition(s)	User must be in character creation menu User has selected level and class
Basic Flow	<ul style="list-style-type: none"> • User is in character creation menu • User selects "View final character" • A character sheet for the character is shown on screen • User selects "Export final character" • A character sheet for the character is printed into a file
Postconditions(s)	Exports final character to file

1.2 Non-Functional Requirements

1.2.1 Stat Generator

Title	Stat Generator
Description	Creates main stats for the character
Priority	Mandatory: 0
Applicable FR(s)	1.1.4, 1.1.5, 1.1.6

1.2.2 Prerequisite Checker

Title	Prerequisite Checker
Description	Makes sure that a selected trait or attribute meets the required prerequisites
Priority	Mandatory: 0
Applicable FR(s)	1.1.2, 1.1.3, 1.1.4, 1.1.5, 1.1.6

2. System Constraints

2.1 Tool Constraints

2.1.1 User Interface

Title	User Interface
Description	Need to code series of GUI menus using Swing for java
Priority	Mandatory: 0

2.2 Language Constraints

2.2.1 Java

Title	Java
Description	The java programming language will be used to code the application in its entirety
Priority	Mandatory: 0

2.3 Platform Constraints

2.3.1 Downloaded application

Title	Downloaded Application
Description	The application will require being downloaded, and not available in an online only form
Priority	Moderate: 3

2.4 Hardware Constraints

2.4.1 User-End Hardware

Title	User-End Hardware
Description	The User will need a laptop or desktop in order to download and run the software. (it will not be available for mobile)
Priority	Moderate: 3

2.5 Network Constraints

2.5.1 Internet Download

Title	Internet Download
Description	The User will require an internet connection in order to download the application, but not when using the application
Priority	Important: 2

2.6 Deployment Constraints

2.6.1 Webpage for distribution

Title	Webpage for distribution
Description	Will use/design a webpage from which the application can be downloaded for use (beyond the github repository)
Priority	Moderate: 3

2.7 Transition & Support Constraints

2.8 Budget & Schedule Constraints

2.8.1 Budget

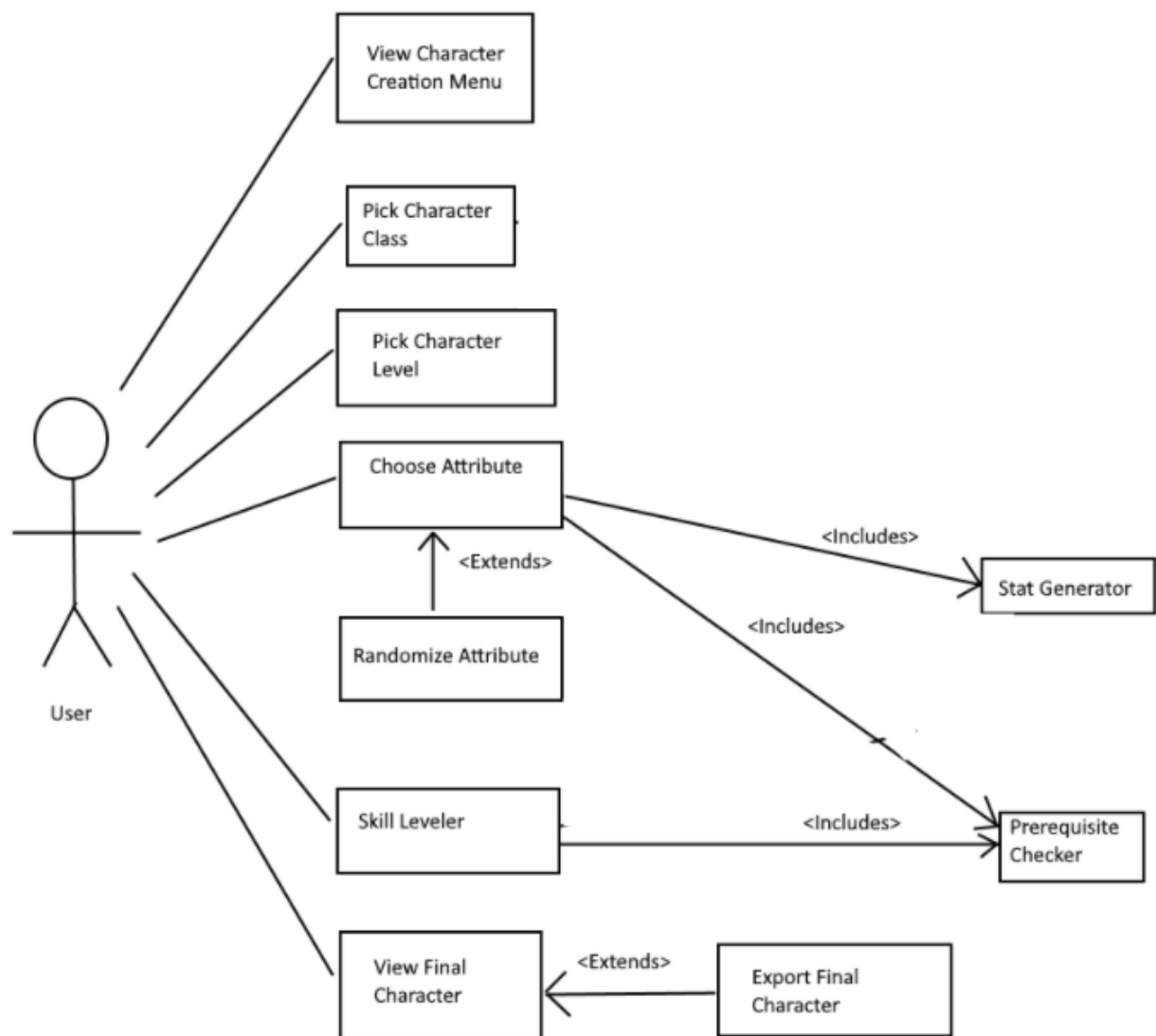
Title	Budget
Description	There is no budget for this project
Priority	Lowest: 5

2.8.2 Due Date

Title	Due Date
Description	This software must be finished by a specific date
Priority	Mandatory: 0

3. Requirements Modeling

3.1.1 Use case diagram



4. Evolutionary Requirements

4.1 Functional Requirements

4.1.1 Full Random

Title	Full Random
Description	Creates a completely random character except class and level
Priority	Moderate: 3
Precondition(s)	User needs to be in character creation menu, and have level and class selected
Postconditions(s)	All traits will be picked and selected

4.1.2 Multiclass Maker

Title	Multiclass Maker
Description	Adds ability for user to create a multiclass character
Priority	Moderate: 3
Precondition(s)	User is in character creation menu
Postconditions(s)	User will need to select all options for multiclass character

4.1.3 Save Character

Title	Store Character
Description	Saves your character to storage in the application
Priority	Important: 2
Precondition(s)	User has to be in view final character menu
Postconditions(s)	Character would be saved in stored character menu

4.1.4 View Saved Characters

Title	View Saved Characters
Description	Navigates to menu with saved characters
Priority	Important: 2
Precondition(s)	Needs to be in main menu
Postconditions(s)	Takes user to view saved character menu

4.2 Non-Functional Requirements