

Requirements Specification: Dungeons & Dragons 5E Character Tools

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1 Introduction

This document is the Software Requirements Specification document for the Dungeons & Dragons 5th Edition Character Tools application. It will serve to unambiguously define the requirements of the application so that efforts in later stages of the development cycle may be more focused and effective.

1.1 Purpose

By formally defining the requirements of the application this document benefits the project in a number of ways:

Reduces the development effort. Explicitly specifying the requirements at the outset of the project minimises the amount of redesign, recording, and retesting. It can also expose omissions and inconsistencies earlier in the development cycle where such problems require less effort to rectify.

Provides a basis for validation. Design and implementation compliance plans can be produced using this SRS as a reference.

It is divided into **X** parts:

The intended audience for this document includes the design, development, and testing teams who will find its contents invaluable as a basis for their work (whether that be designing interfaces or writing test suites to verify the meeting of specific requirements).

1.2 Scope

Application: Dungeons & Dragons 5th Edition Character Tools

The intent of the application is to provide desktop GUI tools for creating, viewing, and storing characters in the D&D 5E ruleset. Users will be able to make selections from the various player classes, backgrounds, races, and equipment lists, as well as customise the statistics, equipment, and levels of characters once they have been created.

By consolidating all the choices that are found across the various books and supplements available to players into one application and providing a means of easily creating and viewing characters with those choices the application aims to streamline the process of planning or experimenting with characters.

Additional features which the application could be extended with include a combat simulation facility, the option of sharing or exporting character profiles with others, and implementing the suite as a web application.

In order to provide an effective character creation suite it will be necessary for the application to:

- Accurately model the systems present in D&D 5E;
- Be up to date on all the available character options that exist across the D&D 5E books;
- Since additional releases are inevitable the application should be able to easily integrate further options.
- Provide a GUI that:
 - Is pleasing to the eye;
 - Presents all the desired character information in a useful way, that is:
 - Can all be viewed at once if needed;
 - Can be contrasted

with other options; - Is self-explanatory either through labels or tooltips. - Makes it easy to make selections or edits.

In order to provide a combat simulation facility the application will need to be extended to include:

- Data for modelling the various creatures that can be involved in combat with player characters; - Accurate modelling of the combat systems in D&D5E; - A suitable interface for setting up, running, and analysing combat encounters. - Since D&D5E combat is often represented as a grid of 5" by 5" squares it would make sense to base the interface around this model; - The scope of this feature does not extend to implementing an artificial intelligence system for creatures in the combat scenario.

Enabling the sharing or exporting of character profiles will require the application to be able to convert the totality of a character's attributes to a string, and in turn be able to import such a string and construct the same character entity.

Implementing the suite as a web application would entail embedding it into a website so that users will not have to run an executable on their desktop computer to use the application.

1.3 References

This SRS shall be used in conjunction with the following documents:

D&D5E Character Sheet, 1, Wizards of the Coast LLC, 28/08/2017.

D&D5E Spellcasting Sheet, 2, Wizards of the Coast LLC, 28/08/2017.

1.4 Definitions, acronyms, and abbreviations

In order to fully disambiguate terms used in this SRS a number of key terms are defined below:

1.4.1 Dungeons & Dragons 5th Edition:

The 5th edition rules system for the Dungeons & Dragons roleplaying game made and owned by Wizards of the Coast LLC. Since the rules and mechanics vary between different editions of the game it is important to define which edition the application is intended to model. The rules and mechanics being modelled are found in the 5th Edition Player's Handbook, errata clarification documents, and the wide range of supplement material that is produced for players such as the 5th Edition Sword Coast Adventurer's Guide.

1.4.2 D&D5E:

Acronym for Dungeon's & Dragons 5th Edition. "5E" also used in isolation to abbreviate "5th Edition".

1.4.3 Character:

A character in the context of D&D5E is an entity comprised of many different attributes that have been selected from a variety of options by a player including, but not limited to:

- Name (e.g. Tiberius) - Race (e.g. Dwarf) - Class (e.g. Fighter) - Background (e.g. Folk Hero)

A comprehensive picture of the elements that make up a character can be seen by examining the D&D5E Character Sheet(MAKE A HYPERLINK) included in the Appendix.

1.4.4 Player

The person making a D&D5E character, synonymous with "user" of the D&D5E Character Tools application.

1.5 Overview

2 Overall description

2.1 Product perspective

2.1.1 System interfaces

2.1.2 User interfaces

2.1.3 Hardware interfaces

2.1.4 Software interfaces

2.1.5 Communications interfaces

2.1.6 Memory constraints

2.1.7 Operations

2.1.8 Site adaptation requirements

2.2 Product functions

2.3 User characteristics

2.4 Constraints

2.5 Assumptions and dependencies

2.6 Apportioning of requirements

3 Specific requirements

3.1 External interfaces

3.2 Functions

3.3 Performance requirements

3.4 Logical database requirements

3.5 Design constraints

3.5.1 Standards compliance

3.6 Software system attributes

3.6.1 Reliability

3.6.2 Availability

3.6.3 Security

3.6.4 Maintainability

3.6.5 Portability

3.7 Organising the specific requirements

3.7.1 System mode

3.7.2 User class


3.7.3 Objects

3.7.4 Feature

3.7.5 Stimulus

3.7.6 Response

3.7.7 Functional hierarchy



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CLASS & LEVEL

BACKGROUND

PLAYER NAME

RACE

ALIGNMENT

EXPERIENCE POINTS

STRENGTH

DEXTERITY

CONSTITUTION

INTELLIGENCE

WISDOM

CHARISMA

INSPIRATION

PROFICIENCY BONUS

SAVING THROWS

☐ Strength

☐ Dexterity

☐ Constitution

☐ Intelligence

☐ Wisdom

☐ Charisma

SKILLS

☐ Acrobatics (Dex)

☐ Animal Handling (Wis)

☐ Arcana (Int)

☐ Athletics (Str)

☐ Deception (Cha)

☐ History (Int)

☐ Insight (Wis)

☐ Intimidation (Cha)

☐ Investigation (Int)

☐ Medicine (Wis)

☐ Nature (Int)

☐ Perception (Wis)

☐ Performance (Cha)

☐ Persuasion (Cha)

☐ Religion (Int)

☐ Sleight of Hand (Dex)

☐ Stealth (Dex)

☐ Survival (Wis)

ARMOR CLASS

INITIATIVE

SPEED

Hit Point Maximum

CURRENT HIT POINTS

TEMPORARY HIT POINTS

Total

SUCCESSSES ☐ ☐ ☐ ☐

FAILURES ☐ ☐ ☐ ☐

HIT DICE

DEATH SAVES

PERSONALITY TRAITS

IDEALS

BONDS

FLAWS

PASSIVE WISDOM (PERCEPTION)

OTHER PROFICIENCIES & LANGUAGES

NAME

ATK BONUS

DAMAGE/TYPE

ATTACKS & SPELLCASTING

CR

ST

DT

GR

PR

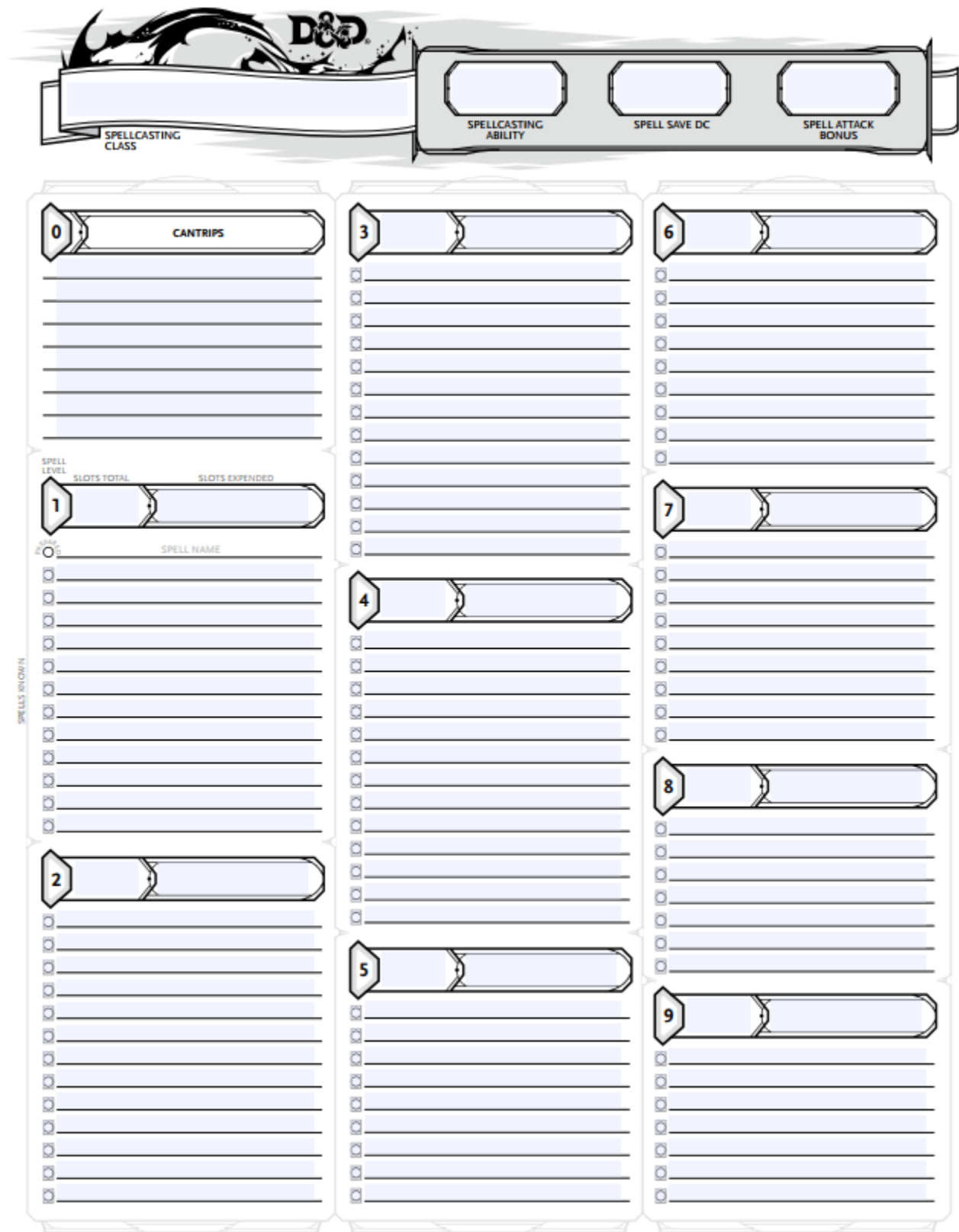
EQUIPMENT

FEATURES & TRAITS

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Figure 1: D&D5E Character Sheet

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The image shows a D&D5E Spellcasting Sheet template. At the top, there is a header section with a decorative banner on the left and three input boxes on the right. The banner contains the text "SPELLCASTING CLASS". The three input boxes are labeled "SPELLCASTING ABILITY", "SPELL SAVE DC", and "SPELL ATTACK BONUS".

Below the header, the sheet is organized into three columns, each representing a different spell level. The columns are labeled with numbers 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9. Each column has a header box with the number and a label. The labels are "CANTRIPS" for level 0, and "SLOTS TOTAL" and "SLOTS EXPENDED" for levels 1 through 9. Each column also has a "SPELL NAME" label and a series of checkboxes for tracking spell usage.

On the left side of the sheet, there is a vertical label "SPELLS KNOWN" next to a series of checkboxes, indicating which spells the character knows.

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Figure 2: D&D5E Spellcasting Sheet