

## DnD System Requirements - Jeremiah Hobbs

### User Requirements:

- Spell: Functional Requirement
- Users will be able to cast spells while they are in actions, view what types of spells are available for them to use, and view durations of spells. Spells will occasionally occur during bonus actions, reactions and all will last specific durations. Spells each have damage type if they are damaging spells, health restoration information if they are healing, casting times, and level selection starting from level Cantrip up to level 9. Duration can last longer than one action or turn and will vary spell by spell. Spells will also change depending on the level the character casts.

### System Requirements:

- Abstract Spell: Non- Functional Requirement
- Extended by character class, abstract character class, and monster class.
- Fields:
  - Int level - This int will determine how effective the spell cast by the character will be. Ranging from the users input 0 through 10.
  - Enum school - This enum determines from a predetermined list what type of school each spell exists of. Either abjuration, conjuration, divination, enchantment, evocation, illusion, necromancy, or transmutation.
  - Int castingTime - This integer will hold the amount of time a spell takes to cast.
  - String name - This string will keep track of the name of the spell.
  - Int duration - This int keeps track of the duration of the spells effects.