# Starportal

Homework assignment for CSC260, OOD

Technical Design – CoC Grader V1.0

• Version control system: GitHub - <https://github.com/Redmage753/Starportal>

• Language: C# 7

• Framework: .NET 4.6.1

• IDE: Visual Studio 2017

• Data Store: None/NA

• Application Type: Windows Console Application

Problem statement: There is no good Stargate game - so I decided to create the core of one to build up myself, referencing my love of D&D and the stargate-concept for choosing a destination to explore.

Proposed solution: Create a windows console app text-based game that will allow a user to create a character and go on an adventure; a randomly chosen location. Additional features to be added over time.

Approximate timeframe: July 17th – August 3rd, 2017

Estimate of resources: Developer time from one developer 10 hours a week for about 3 weeks, acquisition of developers’ tools.

Approval Authority: Jason Jenkins

D&D Starportal Adventure Game Minimum Functionality

* Create Character – Minimum is 3 Roles
* Enter Tavern – Minimum initial Tavern
* Jump through portal
  + randomly selects between set of 4 environments (more to be added)
  + must fight through 3 floors to win.
  + Can retreat
    - Rooms reset on rest.
    - Do not reset on meal.

Project Design / Details:

Character Creation:

* Characters:
  + Name
  + Class
  + Level
  + Specialization
  + Skills
  + Stats
  + Gold

**Key:**

Interface

Class

Abstract Class

* 3 Core Classes:
  + Warrior
    - Specialization (Ex. Public Class ShieldFighter : Warrior, ICharacter & Public Class TwoHandedFighter : Warrior, ICharacter)
      * Shield / 1h Mace
      * Two Hand – Great sword
    - Skills
      * Feat of Strength (Break door, Break Chest, Toss Person)
  + Magician
    - Specialization: (Ex.Public Class WhiteMage : Magician, ICharacter)
      * White – Healing
        + Searing Smite
        + Shield
      * Red – Destruction
        + Fireball
        + Firebolt
      * Black – Necromancy
        + Summon Skeleton
        + Drain Life
    - Skills:
      * Detect Magic
  + Scoundrel
    - Specialization: ( Public Class Assassin : Scoundrel, ICharacter)
      * Assassin (critical) – dual daggers
      * Ranger – Long bow + Shortsword
      * Swashbuckler (Offtank) Rapier + daggers
    - Skills
      * Stealth
      * Pick Lock
      * Find Traps
* Races:
  + Human +1 all
  + Halfling +3dex +2Cha
  + Elf +3int +2dex
  + Dwarf +2con +3str
* Stats:
  + Strength
  + Dexterity
  + Wisdom
  + Intelligence
  + Charisma
  + Constitution

MonsterCharacter:

* Dialogue
* Attack Stats
* Defense Stats
* Loot
* Experience Value

QuestHub:

* Opening scene for the player, initial story telling

Tavern

* Options:
  + Order Food/Meal
  + Speak with the Bartender for drinks (Liquid Courage)
  + Speak with the Innkeeper to rest
  + Begin Adventure

Portal/Roombuilder:

* Randomly select from 4 types of environments:
  + Fire
    - Salamanders (Level 1)
    - Elementals (Level 2)
    - Boss - Demon (level 3)
  + Earth
    - Duergar (Level 1)
    - Elementals (Level 2)
    - Boss – Stone Giant (Level 3)
  + Water
    - Suaghin (Level 1)
    - Elementals (level 2)
    - Boss – Monster Squid (Level 3)
  + Wind
    - Bugswarm (level 1)
    - Elementals (level 2)
    - Boss – Gryphon (Level 3)

Dungeon

* Description
* Treasure
* Escape Portal
* Continue Door