Sundawg Dungeon Crawler Test/QA Plan

Unit testing:

* Our project architecture makes unit testing easy- each of us is working on our own components that will be combined piece by piece as we near project completion
* Automated testing can be difficult but not impossible in Unreal Engine 5
* Each team member will test their individual components in the First Person Starter game provided by Unreal Engine 5
* Blueprints will be used whenever possible
* Complex interactions will need to be tested via gameplay
* Tests can be completed on local machine since the game will not include networking for multiplayer

Code Quality:

* Any code written will conform to Unreal Engine best practices, as found at https://dev.epicgames.com/community/learning/tutorials/7399/unreal-engine-best-practices-for-blueprints-and-c

System/integration testing:

* To test more complex interactions, we will need to play test the game once enough of the pieces are complete
* Example: Takun enemy AI tests:
  + Enemy will interact with player accordingly
  + Enemy will space back or run forward depending on the situation
  + Making sure that the enemy won't block the camera or viewing angle
  + Finally making sure that the enemy isn't sinking through the floor

Final test:

* The ultimate test will be to actually play the game with all of its integrated parts. We will test the following, integrated as a whole:
  + Level design / sound
  + Character movement
  + Enemy AI
  + Loot mechanics
  + Fun
* We will get together and play through several times as a team, looking for bugs, glitches, edge cases, etc.
* Play testing should ensure that the game is actually fun- if the game isn’t fun, no one will play it!