Currently completed:

* Shop room – Shop is functional, having three preset purchases of a healing potion, ability point potion, and extra stat points. The shop also generates three weapons, and keeps those weapons even if you close the window and reopen it.
* Camera movement – After the help over Teams, the camera moves fine, with the problem before I left being that I changed the number of a plate instead of a camera movement position, so it was trying to move to a point that didn’t exist. Camera moves fine now, and the rooms are also unaffected now.
* “Player” – Set up an extra “Player” actor that moves from room to room in a similar way to the camera, using a timeline. It’s a bit different, just so it doesn’t move the exact same as the camera. This will change from a 3D sphere to a 2D sprite eventually, when I get to the sprite design.
* Partially Fighting – A fighting widget is set up on spawn of the enemy, with buttons set up where I want them. There’s variables for the enemy name, hp and max hp, player hp and max hp, and player ap and max ap. The buttons are named, though only one does something, which is fighting which only closes the widget and moves to the next point.

What will be working on:

* Fighting – Fighting still needs a lot of work, and there’s plenty of parts I need done.
  + Fight button – Rolls the dice against the enemy, then attacks based on the roll. (Normal damage if success, less damage if fail)
  + Ability button – Likely will be done at a later date, but might start work on that since I’m already at the fight widget. Would be one of the last things I do likely, since each weapon needs multiple abilities based on rarity.
  + Item button – Be able to take a turn to use a potion or other item if other items get implemented.
  + Defend button – Skip the turn to increase defense and regenerate some ability points.
  + Enemy’s turn – Will need to set up an AI tree for determining what to do each round, and give the enemy the same ability as the player (Attack, maybe Ability, Item, and Defend). The AI tree will be simple at first, attack unless hp is below a certain percentage, then try to use a potion if it has any. Later work will have different trees for different enemy variants, but this generalized one should be fine if there’s no time.
* Making use of different items – Actually allow the player to swap items out, first starting with only having 1 weapon at a time. If one can be obtained, the player gets a choice to take it or salvage for a small amount of gold. Just need to be able to pass in a weapon when the right button is clicked. Later can be changed to an inventory for maybe up to three weapons, but is also a “if I have time” sort of thing.
* Seed generation – I saw the comment left about making use of seeds, to get a specific random number for rolling. Going to try and make use of it once I get to making other worlds, since those will need to generate randomly.

**Current Progress (Complete, Partially Implemented, Unimplemented):**

* 1. Generation – Room, loot, and enemy generation based on a numbered seed. Rooms generate on entering an area, while enemies and loot can generate when entering the room. – Partially complete, not based on a seed yet.
  2. Fighting – A proper fighting system that is fair but challenging. Turn-based combat with “dice rolls” determining a fight’s outcome. Ex. An axe having 5 Attack and a dice of 1 – 10, attacking an enemy with an armor value of 4. The axe needs to roll greater than 4 to deal 5 base damage. – Partial work is done, but still a lot to go.
  3. Stats – Some stat system to improve the player over time, and to determine the outcome of fights. Stats included: Attack, increasing damage dealt; defense, increasing the chance that an enemy attack fails; dexterity, improving dice rolls; and speed, determining the order of attacks (the enemy gets the first turn if their speed is higher than the player); along with health to determine winning and losing. – Stats are set up in the game instance, but are not yet functional. Close to being used, but need to create a stat formula for how attack and dexterity will work.
  4. Abilities – Various abilities tied to the items you obtain, based on the tier of item. All are going to affect battles differently, from taking a turn to boost stats to modifying the dice to either hit more often for less damage or hit less often for more damage. – Unimplemented, will be worked on after fighting is functional
  5. Animation – Fitting 2D animation over a 3D environment, as well as setting up animations to play over specific events and for specific weapons. Would need animations for idle, preparing to attack, attacking, being attacked, and defending. – Unimplemented.
  6. UI – Working, good looking UI for the menu and game itself, needing custom designs for the buttons instead of the default in the widgets. – Many widgets are completed, but many more are to come, as well as making them look better in the final product. Fighting is recently worked on, and shop recently completed.
  7. Progression – Moving between areas, levels, and the progression of the player and enemies. Having areas and rooms labelled as X-Y, X being area number and Y being room number, incrementing when moving to a new room or area. Need a system for levelling enemies and the exp they would drop for the player to level up as well. Levelling increasing HP, Attack, Dexterity, and/or Speed. – Movement between rooms is working and can interact with the rooms, but enemy and player levelling are unimplemented.
  8. AI – Use of a behavior tree to control enemy behavior; for attacking, using a skill, or healing. – Unimplemented, likely to be worked on as fighting is worked on.

**Schedule (Complete, In Progress, Incomplete/Unreached)**

1. Basic design
   * 1. Set up player pawn as a moving camera, no controls for the pawn. Get game instance set up for player stats and information. Create basic enemy framework, with stats set up. Basic UI for controlling the player, with attacking and skill button. – Almost complete, just need fighting UI and working enemies.
2. Working game
   * 1. Get basic mechanics working, such as combat. Requires behavior tree for the AI first, then make stats and dice rolls work for basic combat. Once level is completed, move to a predesigned room due to no seeded runs set up yet. Create working pause menu for exiting the game whenever. Working weapon variants for the player. Set up treasure and shop rooms. – Soon to be in progress.
3. More mechanics
   * 1. Set up seeded runs, so each new run of the game is different from the last. Create sprites for the player and enemies and set them up possibly as animations. Create randomization of enemies, with enemy types and variants as well as bosses. Should be able to do a full run of the game. – Unreached.
4. The looks
   * 1. Get the animations for enemies and players to work, set up background of the levels, make the UI look nice, set up the lighting for 3D objects. A general setup of all the art stuff. – Unreached.