CAPSTONE PROJECT
JOB DESCRIPTIONS

Instructions

Read through this document carefully. As you read make note of any jobs that sound interesting to you. Choose at least three jobs you wish to apply to and your order of interest ranked (1 being your top choice). Once complete fill in your top three options ranked on the shared spreadsheet in OneDrive.

Job	Detailed Description
Design Project Manager	**Team: Scene, concept art, script writer.** **First Semester (Due Dec. 9th):** Hold large team meetings to decide on overall genre and requirements WITH OTHER PM. **Have small team meetings to ensure each scene person understand exactly what will be in their scene. Assist scene people in finding tutorials and understanding basics of terrain/scene building. Ensure they understand colliders and include them in build. Set due dates for each! **Second Semester (Due March 30th):** Fill out team **documentation every other week**- must upload to OneDrive. Have one on one meetings as well as larger team meetings. Help people export/import, fulfil their role, debug, reassign roles as needed and fire people.
Code Project Manager	**Team: Player Movement, Health, NPC, Player Attack, Enemies/Boss,** **First Semester (Due Dec. 9th):** Hold large team meetings to decide on overall genre and requirements WITH OTHER PM. **Have small team meetings to find one code sequence that meets all the requirements of the game. Create a list of the tutorials with video numbers and links and who is responsible for each one. Set due dates for each! **Second Semester (Due March 30th):** Fill out team **documentation every other week**- must upload to OneDrive. Have one on one meetings as well as larger team meetings. Help people export/import, fulfil their role, debug, reassign roles as needed and fire people.
	PRE- PRODUCTION
Dialog/Script Writer – MAIN PORTION DONE FIRST SEMESTER	**First Semester (Due Dec. 9th):** Write dialogue/script and overall story. This includes quests and side quests, progression through levels with a detailed description on what the goal/quest is in each scene. **Second Semester (Due March 13th):** Code/create GUI text/character text/ captions if applicable to story.
Concept Art/Designer – MAIN PORTION DONE FIRST SEMESTER	**First Semester (Due Dec. 9th):** Work with script writer to fully understand what is happening in each scene. Make mock-up of basic scene features with the help of scene personnel. Work with PM's to find a suitable asset pack- must thoroughly research. **Second Semester (Due March 13th):** Help scene people in clarifying/understanding their requirements of their individual scenes. Do certifications when not working with scene personnel.
	PRODUCTION
Player Movement – MAIN PORTION DONE FIRST SEMESTER	**First Semester (Due Dec. 9th):** Player animation, movement, and main camera. Can use a premade character controller from asset pack or customize/create your own but if you use asset you must understand how it works, comment code, and help others use the player with their scene/code. Write up an official "controls" list to display during capstone event so people know how to play the game. **Second Semester (Due March 30th):** Work on Certifications when not doing main project - must do 3 each week to earn credit! Help debug when needed.

Enemy 1	**First Semester (Due Dec. 9th):** Certification work most of the time first semester- must do 3 each week to earn credit. Spend one week once story is complete to find a suitable tutorial with the help of the code PM and other enemy/boss personnel. Should use same variables and info in each enemy/boss just vary difficulty. Must work with health person to ensure the enemies hurt the player. **Second Semester (Due March 9th):** All code related to: 1. enemy animation 2. movement/AI/wander 3. dialogue (if applicable) 4. attack – including debugging and working with health person on damage to player 5. Optional: health bar for enemy or displayed health points MUST PLACE IN SCENE(S) ENEMY NEEDS TO BE
Enemy 2	**First Semester (Due Dec. 9th):** Certification work most of the time first semester- must do 3 each week to earn credit. Spend one week once story is complete to find a suitable tutorial with the help of the code PM and other enemy/boss personnel. Should use same variables and info in each enemy/boss just vary difficulty. Must work with health person to ensure the enemies hurt the player. **Second Semester (Due March 9th):** All code related to: 1. enemy animation 2. movement/AI/wander 3. dialogue (if applicable) 4. attack – including debugging and working with health person on damage to player 5. Optional: health bar for enemy or displayed health points MUST PLACE IN SCENE(S) ENEMY NEEDS TO BE
Boss	**First Semester (Due Dec. 9th):** Certification work most of the time first semester- must do 3 each week to earn credit. Spend one week once story is complete to find a suitable tutorial with the help of the code PM and other enemy/boss personnel. Should use same variables and info in each enemy/boss just vary difficulty. Must work with health person to ensure the enemies hurt the player. **Second Semester (Due March 9th):** All code related to: 1. boss animation 2. movement/AI/wander 3. dialogue (if applicable) 4. attack – including debugging and working with health person on damage to player 5. Health bar mandatory for boss – should be attached to top of boss MUST PLACE IN SCENE(S) ENEMY NEEDS TO BE
Player Health System	**First Semester (Due Dec. 9th):** Certification work most of the time first semester- must do 3 each week to earn credit. **Second Semester (Due March 9th):** Code related to player health. 1. Display health with text or health bar for player. 2. Code enemy damage variables that will hurt the player and be easily applicable with the enemy. 3. Debug with enemy and boss people to ensure their particular models work with your code – they code attack & animation for the attack you code the attack hurting the player and reducing

	health. Your work is due one week ahead of theirs to allow time to debug.
	4. Must attach to player in each scene!
Day/Night Cycle & Room Transition System	**First Semester (Due Dec. 9th):** Certification work most of the time first semester- must do 3 each week to earn credit. **Second Semester (Due March 10th):** Code for day and night cycle – Must add to each scene! Must do room transition based on victory condition of each room (all enemy's dead, find an object, solve a puzzle, etc.) Must ensure scene transition works for all scenes in the order intended!
Player Attack	**First Semester (Due Dec. 9th):** Certification work most of the time first semester- must do 3 each week to earn credit. **Second Semester (Due March 11th):** All code related to: 1. Player attack animation (should be a part of the asset/model but you will code it to happen when player attacks) 2. Player attack – including debugging and working with enemy people on the attack damages the enemy. This can include projectiles, melee, or a combination- must do all related to player attack. This includes switching weapons if that is applicable. Only thing not included is spell cast which is separate but the two must collaborate closely if that is a piece of the game. 4. Optional: display text with how much damage each attack is doing as the fight is going on.
NPC 1 - Same due dates as player attack!	Must place into the scene in a location that makes sense for that NPC. 1. Dialogue- can say one specific thing (give a quest) or interact with character – give options for character to respond and/or accept/deny quest. YOU CODE EVERYTHING TO DO WITH THIS DIALOGUE SYSTEM & TEST WITH PLAYER. 2. Code movement: AI/Wander unless stationary 3. Ensure animation works with movement (if there is movement)
NPC 2 - Same due dates as player attack!	Must place into the scene in a location that makes sense for that NPC. 1. Dialogue- can say one specific thing (give a quest) or interact with character – give options for character to respond and/or accept/deny quest. YOU CODE EVERYTHING TO DO WITH THIS DIALOGUE SYSTEM & TEST WITH PLAYER. 2. Code movement: AI/Wander unless stationary Ensure animation works with movement (if there is movement)
NPC 3 - Same due dates as player attack!	Must place into the scene in a location that makes sense for that NPC. 1. Dialogue- can say one specific thing (give a quest) or interact with character – give options for character to respond and/or accept/deny quest. YOU CODE EVERYTHING TO DO WITH THIS DIALOGUE SYSTEM & TEST WITH PLAYER. 2. Code movement: AI/Wander unless stationary Ensure animation works with movement (if there is movement)
Audio - Same due dates as player attack!	Background Music – must find royalty free (or create) background music. 1. Must have music for all 10 scenes, menu, and credit screen. 2. Must add to each scene, loop as appropriate, adjust volume and do any applicable code/audio listener required. 3. Must import into scenes and debug to ensure that background music works appropriately.

	4. Optional: Will do actual MP3 dialogue **if applicable** to story- this includes recording voice overs and adding into the game with any applicable coding/audio listener.

Choose at least three based on your game:
 	
   i. Cinematic role/cutscenes
   ii. XP & skill tree
   iii. Inventory (must include code for player to pick up/drop/access inventory)
   iv. Spell cast system
   v. Save/Load System *must include save/load screen to access the system
   vi. Pause/Resume options
   vii. Consumables or collectible items
   viii. Money or currency systems
	People doing these roles must find ONE tutorial sequence to work with- cannot find their own individual piece only.
	First Semester (Due Dec. 9th): Work together <u>with health, enemies, attack and boss people to find a tutorial sequence.</u> Decide who is doing each tutorial as appropriate to their role. Assign and DOCUMENT this ahead of time.
	Second Semester (Due March 10th): Code and debug with the character.
	1. Do everything to do with your role (examples: inventory- code pick up, drop, organize, and use items. Spell Cast- code how player can choose a spell, cast, and damage to the enemy. Cinematics- create scene but also code it to play in the game, link it to the scene it leads into. Consumables- not only code for functionality but find/create assets for those consumables.)
	2. Export & import into the game – debug and work with anyone else that will affect your role in any way.

Menu & Credit Screen	**First Semester (Due Dec. 9th):** Find tutorial – set firm dates for yourself to complete early second semester. **Second Semester (Due March 2nd):** Create menu screen – export and import into game. Needs to match overall game design, include title and at a minimum a start and exit button. Start button must take player to LEVEL ONE! Test and debug with main game build file. Credit screen – must include all team members names and roles. Must be functional, exported and into game- debug any issues.
Level_1 (must name your scene Level_1 and have it location in the main Asset→Scene folder). As soon as you create your terrain move it to your Scene folder and rename Terrain_Level_1. Must place player in each scene you create.	**First Semester (Due Dec. 9th):** Certification work most of the time first semester- must do 3 each week to earn credit. Work with concept artist to understand the requirements of your scene. Wait for concept artist and writer to complete their roles before going to them for assistance/information. **Second Semester (Due March 13th):** Terrain & asset tutorials to start out with- learn the right way to do things. Create your scene using ONLY THE ASSETS PROVIDED. 1. Must follow the overall story/quest for your scene 2. Include all applicable colliders (trees, walls, etc.) 3. Include at least one Easter egg/hidden item/special addition
Level_2 (must name your scene Level_ 2 and have it location in the main Asset→Scene folder). As soon as you create your terrain move it to your Scene folder and rename Terrain_Level_2. Must place player in each scene you create.	**First Semester (Due Dec. 9th):** Certification work most of the time first semester- must do 3 each week to earn credit. Work with concept artist to understand the requirements of your scene. Wait for concept artist and writer to complete their roles before going to them for assistance/information. **Second Semester (Due March 13th):** Terrain & asset tutorials to start out with- learn the right way to do things. Create your scene using ONLY THE ASSETS PROVIDED. 1. Must follow the overall story/quest for your scene 2. Include all applicable colliders (trees, walls, etc.) 3. Include at least one Easter egg/hidden item/special addition
Level_3 (must name your scene Level_3 and have it location in the main Asset→Scene folder).	**First Semester (Due Dec. 9th):** Certification work most of the time first semester- must do 3 each week to earn credit.

As soon as you create your terrain move it to your Scene folder and rename Terrain_Level_3. Must place player in each scene you create.	Work with concept artist to understand the requirements of your scene. Wait for concept artist and writer to complete their roles before going to them for assistance/information. **Second Semester (Due March 13th):** Terrain & asset tutorials to start out with- learn the right way to do things. Create your scene using ONLY THE ASSETS PROVIDED. 1. Must follow the overall story/quest for your scene 2. Include all applicable colliders (trees, walls, etc.) 3. Include at least one Easter egg/hidden item/special addition
Level_4 (must name your scene Level_4 and have it location in the main Asset→Scene folder). As soon as you create your terrain move it to your Scene folder and rename Terrain_Level_4. Must place player in each scene you create.	**First Semester (Due Dec. 9th):** Certification work most of the time first semester- must do 3 each week to earn credit. Work with concept artist to understand the requirements of your scene. Wait for concept artist and writer to complete their roles before going to them for assistance/information. **Second Semester (Due March 13th):** Terrain & asset tutorials to start out with- learn the right way to do things. Create your scene using ONLY THE ASSETS PROVIDED. 1. Must follow the overall story/quest for your scene 2. Include all applicable colliders (trees, walls, etc.) 3. Include at least one Easter egg/hidden item/special addition
Level_5 (must name your scene Level_5 and have it location in the main Asset→Scene folder). As soon as you create your terrain move it to your Scene folder and rename Terrain_Level_5. Must place player in each scene you create.	**First Semester (Due Dec. 9th):** Certification work most of the time first semester- must do 3 each week to earn credit. Work with concept artist to understand the requirements of your scene. Wait for concept artist and writer to complete their roles before going to them for assistance/information. **Second Semester (Due March 13th):** Terrain & asset tutorials to start out with- learn the right way to do things. Create your scene using ONLY THE ASSETS PROVIDED. 1. Must follow the overall story/quest for your scene 2. Include all applicable colliders (trees, walls, etc.) 3. Include at least one Easter egg/hidden item/special addition
Level_6 (must name your scene Level_6 and have it location in the main Asset→Scene folder). As soon as you create your terrain move it to your Scene folder and rename Terrain_Level_6. Must place player in each scene you create.	**First Semester (Due Dec. 9th):** Certification work most of the time first semester- must do 3 each week to earn credit. Work with concept artist to understand the requirements of your scene. Wait for concept artist and writer to complete their roles before going to them for assistance/information. **Second Semester (Due March 13th):** Terrain & asset tutorials to start out with- learn the right way to do things. Create your scene using ONLY THE ASSETS PROVIDED. 1. Must follow the overall story/quest for your scene 2. Include all applicable colliders (trees, walls, etc.) 3. Include at least one Easter egg/hidden item/special addition
Level_7 (must name your scene Level_7 and have it location in the main Asset→Scene folder). As soon as you create your terrain move it to your Scene folder and rename Terrain_Level_7. Must place player in each scene you create.	**First Semester (Due Dec. 9th):** Certification work most of the time first semester- must do 3 each week to earn credit. Work with concept artist to understand the requirements of your scene. Wait for concept artist and writer to complete their roles before going to them for assistance/information. **Second Semester (Due March 13th):** Terrain & asset tutorials to start out with- learn the right way to do things. Create your scene using ONLY THE ASSETS PROVIDED. 1. Must follow the overall story/quest for your scene 2. Include all applicable colliders (trees, walls, etc.) 3. Include at least one Easter egg/hidden item/special addition

Level_8 (must name your scene Level_8 and have it location in the main Asset→Scene folder). As soon as you create your terrain move it to your Scene folder and rename Terrain_Level_8. Must place player in each scene you create.	**First Semester (Due Dec. 9th):** Certification work most of the time first semester- must do 3 each week to earn credit. Work with concept artist to understand the requirements of your scene. Wait for concept artist and writer to complete their roles before going to them for assistance/information. **Second Semester (Due March 13th):** Terrain & asset tutorials to start out with- learn the right way to do things. Create your scene using ONLY THE ASSETS PROVIDED. 1. Must follow the overall story/quest for your scene 2. Include all applicable colliders (trees, walls, etc.) 3. Include at least one Easter egg/hidden item/special addition
Level_9 (must name your scene Level_9 and have it location in the main Asset→Scene folder). As soon as you create your terrain move it to your Scene folder and rename Terrain_Level_9. Must place player in each scene you create.	**First Semester (Due Dec. 9th):** Certification work most of the time first semester- must do 3 each week to earn credit. Work with concept artist to understand the requirements of your scene. Wait for concept artist and writer to complete their roles before going to them for assistance/information. **Second Semester (Due March 13th):** Terrain & asset tutorials to start out with- learn the right way to do things. Create your scene using ONLY THE ASSETS PROVIDED. 1. Must follow the overall story/quest for your scene 2. Include all applicable colliders (trees, walls, etc.) 3. Include at least one Easter egg/hidden item/special addition
Level_10 (must name your scene Level_10 and have it location in the main Asset→Scene folder). As soon as you create your terrain move it to your Scene folder and rename Terrain_Level_10. Must place player in each scene you create.	**First Semester (Due Dec. 9th):** Certification work most of the time first semester- must do 3 each week to earn credit. Work with concept artist to understand the requirements of your scene. Wait for concept artist and writer to complete their roles before going to them for assistance/information. **Second Semester (Due March 13th):** Terrain & asset tutorials to start out with- learn the right way to do things. Create your scene using ONLY THE ASSETS PROVIDED. 1. Must follow the overall story/quest for your scene 2. Include all applicable colliders (trees, walls, etc.) 3. Include at least one Easter egg/hidden item/special addition
POST-PRODUCTION	
QA/Debugging Team – this is in addition to your main role	March 9-27th Group of 3-5 people who will do the final debugging & finishing touches. *Each person should debug their piece when the import it into the game. *This group should only be for final QA testing and working on smaller bugs and glitches- not fixing other's pieces for them.
Video Trailer - this is in addition to your main role	March March 25-April 1st Create a professional and creative game trailer. Requirements 1. About 2 min. in length 2. Easily readable captions 3. Gameplay
Trifold Designer - this is in addition to your main role	March 25th- April 1st Create a professional and creative trifold for the Capstone event. Should include: 1. Game Title 2. Screenshots 3. Control Information 4. Victory Condition

	5. Student names/roles
Capstone Presenters (3-5 students) - this is in addition to your main role	Capstone night only- April 2, 2020! Be ready to talk about the game, answer questions, help people test the game, explain lessons learned, etc.

March 13ᵗʰ- April 4ᵗʰ – Students not doing one of the above will create their Workshops in detail, teaching the class something (see workshop requirements for more details). Workshops will begin April 4th.

Students finishing build (post-production list above) will have until April 17ᵗʰ to turn in their workshop.