**Dissertation Plan**

Knowledge to Include:

* Life of a servant
* Life of a cook/kitchen staff
* Life of a courtier
* Life of royal family
* Major historical events of the time

Inclusions:

* Dialogue/interaction with NPCs
* Quests to complete
* Tasks set by NPCs
* Go-and-find tasks
* Explore the palace
* Given permission by king to access all areas of palace
* Court intrigue
* Conflict

Areas to Recreate:

* Courtyards
* Great Hall
* Chapel Royal
* Kitchens
* King’s apartments
* State apartments
* Queen’s apartments
* Royal family apartments
* Servant’s quarters
* Courtier rooms
* Gardens
* Ponds
* River
* Boathouse
* Tiltyard
* Bowling alley
* House of Easement
* Tennis court

Research Areas:

* RPGs
* Interacting with NPCs
* Interacting with objects
* Collecting objects
* Animated NPCs
* Appropriate assets
* Detail of HCP
* Decent water in Unity
* 3D grass and flowers etc
* Tudor music playing (written by Henry VIII (find royalty free?))
* Minimap
* Realistic fires in each room
* SFX around the palace (river, birds, footsteps, NPCs talking, fire etc)
* Post processing and cool lighting
* Animation of NPCs (close to last)
* Multiple ongoing quest system and tracking progress.
* Pathfinding for animated NPCs to walk around the palace (close to last)
* Signposts in rooms? Guidance to player

Story Ideas

* Tutorial quest? – Explains controls, shows you that you can learn more about objects by clicking on them when a UI appears,
* At the beginning choose royal quest, courtier quest, worker quest or historical events quest.
* These each then initiate certain goals to achieve, such as finding a certain number of an object, finding locations etc.
* Start with very simple tasks, and only a few to create a successful game loop.
* Have completed tasks unlock more areas of the palace (simply, allow door to that area to be openable upon completion)
* Possibly start with worker areas, completing tasks for them, leads to courtier requesting help, unlocking areas, once tasks complete unlocks royal areas and tasks.

Notes

* Comp-3 Interactive movement tutorial series.
* This includes interaction, which can be edited to my needs, but also shows door opening.
* Walking sound effects on different materials (could cause issues with the materials/assets I use) but this will also require generally more audio throughout or may seem weird.
* Look through Comp-3 to find other helpful tutorials
* Create a nice water shader for the river and ponds, Unity tutorial, among others.
* Watch Brackeys inventory code video, will help with bringing up UI in code, to use when interacting with NPC object. Could also use this to create an inventory for picking things up around the palace.
* Need to think of a final game idea I want. A nice loop, how it ends etc.
* Will only need separate scripts for extra info objects if they overlap, this may not be necessary generally. Can use base interaction script and use different UIs for each object.
* Enter an area/room, pops up a UI that gives you the option to press a button to start that quest. Could also then use this to give the option to learn about the room you’re in, triggers?
* A way to have multiple quests running at once and tracking progress of each simultaneously.
* Perhaps a UI that shows progress of a quest once part of it completed (e.g 2/10 apples found!)
* To improve dialogue system, look into using JSON files to store dialogue and use that for correct NPC. Current system works, but simplistic, this could improve if time available.
* Wont be able to use button to continue dialogue convos, as mouse will be hidden. Need to transfer click to continue functionality. Dialogue Manager into NPC script?
* Need to allow clicks to pass to next line of dialogue rather than start it again, forcing player to look away from npc to continue. Also perhaps have some sort of player freeze situation?
* Need to find way to stop player movement with mouse when inventory is displayed, this can also be applied to dialogue UI.
* Need to fix out of range issue on NPC dialogue.
* Maybe buttons will be possible, but just have to scroll using arrow keys and select with enter rather than using the mouse? This could be used for inventory.
* Use slightly different object slug for items that require multiple to be found. E.g if need 10 potion\_log, then, due to code preventing multiple of same item to be picked up, will need to use something like potion\_log1, potion\_log2 etc for itemSlug. Probably a better method than this, but it is a solution. (Test this)

Notes for Write up

* Comp-3 Interactive used as resource
* Had research how to interact with objects and NPCs

1. Comp-3 Interactive
2. Brackeys
3. GameGrind

* Had to research how to start dialogue with NPCs

1. GameGrind
2. Jason Weimann
3. BMo

* Had to research how to animate NPCs and have them walk around the palace
* Benefits of using JSON for items list
* Researched AC for best UI appearance