Project 1

The Lost Poems

Mobile Augmented Reality Hunting Game Design

2020.2
Nottingham, UK

This Project is one of my school projects during the graduate study. The Lost Poems is a mobile augmented reality treasure hunting game set in Newstead Abbey.

Background

- **Newstead Abbey**

Newstead Abbey is a monastery in England, located in Nottinghamshire. The famous poet Lord Byron was the owner of the abbey. Many visitors still visit Byron's former home to discover his history.

- **AR game**

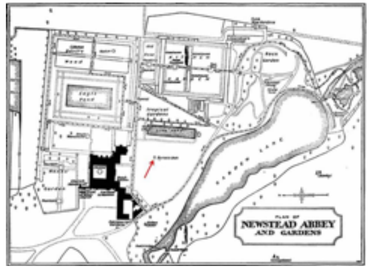
history + location + game

When I visit the garden, I have wanted to know more about the history of it. I wondered what the poet Lord Byron would do here. Is this the same garden as the one in Byron's time? I want if there are a game could tell me more about it and also play with must be good. Therefore, I want to design a game that helps players to learn more about Byron and interact within the garden. I used some chance cards to come up with an idea that playing a reality treasure hunting game is a good way to explore the garden. The question and challenging cards then caution me of the time of play, as well as the location of the hiding spots and the routes that must be carefully considered and evaluated.

Design Thinking

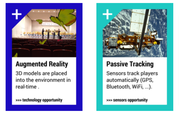
I use the idea card design by Nottingham mixed reality lab to figure out the design challenge, oppotuinity and problems during the AR game design.

- **Oppotunity**



Old Newstead Abbey map

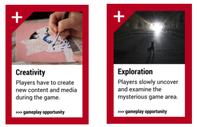
This garden is a good location to travel. A hunting game is suit for this location.



Player could use phone to explore the garden, find and colllect objects.

Lord Byron

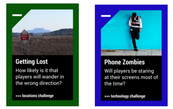
The game could base on Lord Byron life. Use different location in the garden to match Byron's poem or life .



Player could create new content like write their own poem about the garden/ abbey and see others porm during the game.

- **Challenge**

AR could make Byron more active and player more immersive in the game and get



A physical map needed to guide player and show all clue to players

- **Question**

For people who interesting of Lord Byron's life and poem. Also want to explore the garden

Solve the mystery according to the clues and find the right garden.

Development

There are 16 gardens and points. The hiding places and number needed to be test

Use your phone to explore the gardens and find poems scattered in the garden. wander around the abbey grounds following in the poet's footsteps, we had quite an adventure roving through the gardens, there are 16 different features to discover throughout Newstead Abbey grounds including some of my favorites, the garden lake, the walled garden and Boatswains monument.

Design of location triggers

Most visitors will follow the traditional route suggested on the map and visit the garden counterclockwise. The ideal visit route is the most frequent route people walk, and the ideal trigger point should be the ideal viewpoint of the object. The ideal visit route is the most frequent route people walk shown as the red dash line in figure. The ideal trigger point should be the ideal viewpoint of the object. I follow the traditional route and put the ideal trigger point at the best viewpoint which most visitors like to stand when they arrive there first which shown as the green point in figure. For some visitors who visit clockwise, they can still trigger at an ideal point. The trigger zone is a radius of 15 meters from the object of interest shown as the big red cycles in figure. The approaching zone is the GPS positioning error that can be tolerated, it avoids all blocks things and not include other paths shown as the yellow areas. Players trigger the interaction when the object in their sights. It is not a time-limited game, player could enjoy the sight even they found the wrong place. Since the garden necessitates a lot of walking, the game will be restricted to narrow down the area so the player would not go a long repeat path. If there are so many puzzles to solve, players will find it boring and getting exhausted. Therefore, the six most important spots related to Byron are chosen to hiding the poem. The route also eliminated the far areas, leaving only six major landmarks. These landmarks are about the same distance apart from each other, neither too far nor too close.

Storyboard

01 check the map and clue

The first step is open the map and follow the route. The ideal visit route is the most frequent route people walk, and the ideal trigger point should be the ideal viewpoint of the object.

Visitors can also follow the clues behind each poem that lead them to it.

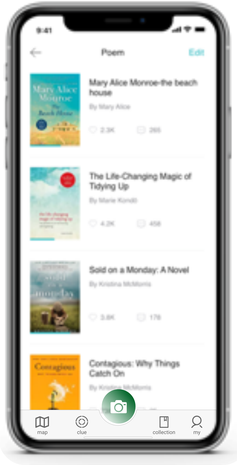
02 According the clue find the treasure site

When visitors find the spot where the treasure is located, they can use the camera to explore the exact location of the poem and the AR will show the distance and orientation to the treasure

03 Find the poem

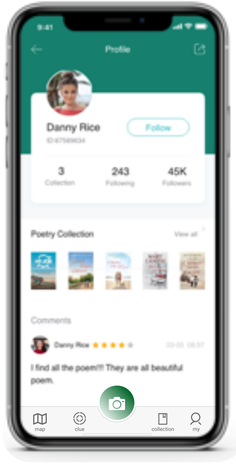
When visitors find the location where the treasure is located, they can click to open the poem corresponding to the collection

04 Read and collect poems



Visitors can read or listen to poetry and hear the thoughts of the original owners while enjoying the views of the garden

05 post feeling



Finally, visitors can post their own feelings and also communicate with other visitors