HERITAGE SITES

VISIT SPACES, WITNESS HISTORY

Module – Digital Studio Practice | CI7810
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MA Games Development (Design)

GAME DESIGN DOCUMENT – HERITAGE SITES

LIST OF FIGURES

Platform: Smart phones, Tablets
Genre: Educational, AR
Target Age: 15+

The game is a feature available in the mobile app called Heritage Sites. It appears after the user has explored the app, and viewed the heritage site, i.e. Tower of London through different timelines.
The game is oriented towards providing information in regards with the events that occurred in Tower of London, which is played in first person.

Four scenarios are available under the "Play scenario" option, and the user can choose to play any of these scenarios. For the sake of this prototype, only one scenario is developed and designed – "Murder of the two Princes". The user will solve a scenario by completing quests provided by non-playable characters or objects, which takes place in Augmented Reality.

GAME PLOT

THE STORY OF THE PRINCES – AS STATED VIA FACTS

The first game story is set in the Tower of London, more specifically, around the disappearance of the two princes. As per the events that occurred, Edward IV was the first English king who belonged to the House of York. But he died suddenly due to an illness that lasted 3 weeks in 9 April 1483. This left his young son to become Edward V of England. But since the heir was too young, Richard, Duke of Gloucester was proclaimed as the protector

Edward V was escorted to London by his uncle Richard, since it was a tradition to have monarchs reside and spend the night before coronation since the 14th century. In June, Edward was joined by his brother, Duke of York. But the boys were declared illegitimate because it was alleged that their father was contracted to marry someone else before his marriage to Elizabeth Woodville.

In July 1483, Richard, Duke of Gloucester was crowned Richard III. During this period, an attempt to rescue the boys failed in July. The two boys were never seen again. It was widely believed that their uncle had them murdered. Apparently, their bodies were buried at the foot of the stairs, hence cementing his grip on the throne. There are several more theories that were also pointed out.
Only one evidence was found through the accounts of Dominic Mancini an Italian who visited England during 1482-83 and mentioned about gossips of this murder.

GAME - CHARACTER & THE WORLD

The player assumes the role of an investigator that has the ability to visit different historical sites and view them in different eras. They can also reconstruct some important events to solve the mystery behind the scenarios.

The world is based around outdoors of Tower of London and player will be exploring this level set throughout their play session. Currently, the outdoors consists of mild vegetation, based inside the Defense walls of the tower. Lamps and fire will help in providing light and guiding the player through the session.

Figure 1: Photographs captured during trip

GAMEPLAY

This section will explain important aspects of the gameplay session, the quest structure, an example scenario/quest crafted for the prototype, impact of player classes on scenarios/quests and rewards.

The game consists of simple scenarios that can be played to gain more information about a historical site. This information is conveyed through quests, where the player has to find information or an object in regards with the quest currently active.
Upon choosing a scenario, the player has the choice of choosing one of the three available player classes. The game begins as the player spawns the level in AR. The player can walk around and explore their surroundings, and depending on the quest, the interactions are avaialble accordingly. Player can interact with NPC's and objects by tapping on them, which pops up dialogue, which may contain a possible quest.

Upon acquiring all the needed information, the game will prompt the player to scan an object or a location. This is then followed by a question, that will ensure that the player has learnt everything and eventually completes the scenario.

Badges and scores are rewarded according to the player performance. In this case, completion time is determines the type of reward player receives.
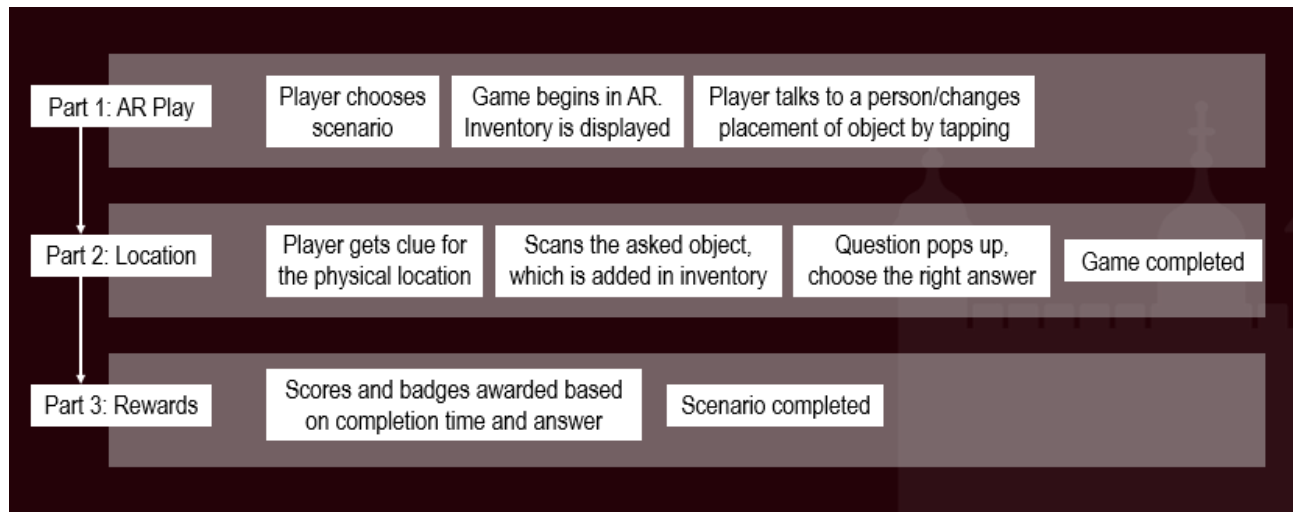
Figure 2: Quest structure

CHARACTER CLASSES

Each scenario available to be played requires players to choose a player class. This will help in customizing the level as per each players skills and interests.

PLANNER

The planner class lets the players explore a simulation completely and then find the final object located physically in location. This class is most suitable for players who aren't huge of walking/exploring too much, but still want to acquire information about the site.

COLLECTOR

The collector class lets the players hunt around objects located physically, which are used to complete the scenario. This class is most suitable for enthusiastic players, that like to explore their surroundings to full extent.

SOCIAL

The social class lets players finds other on-sight players and complete the scenario together. This class is most suitable for players that enjoy social games and want to have a lighthearted experience of learning.
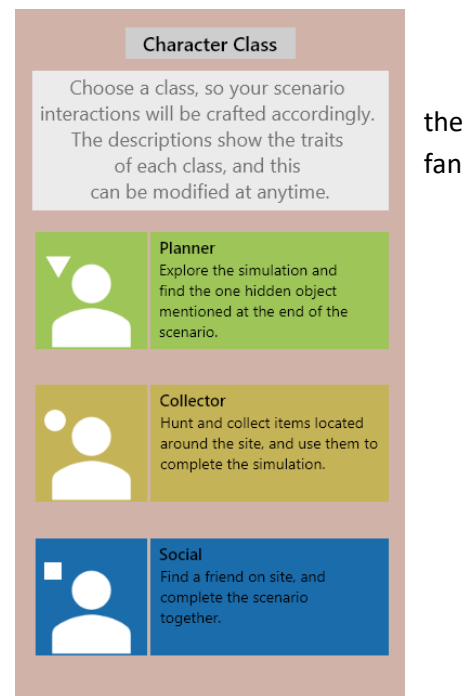

Figure 3: Player classes

During what moment in the app does the player play the scenario?
The game is available at all times in the app, but is best played when the user is present at the heritage site, i.e. Tower of London, and has viewed the site during different eras via the timeline feature.

Is choosing a player class necessary?
Yes, it is important to choose a class before playing a scenario, since this will customize the experience depending on the player requirements.

Is the game played in AR?
Yes, the game is played in AR. The player will spawn the level on a flat surface by tapping to begin playing.

Is there a tutorial to help users understand the interactions in the game?
Yes, there will be a small tutorial in the form of pop-ups that will help users understand how the scenarios work. This will explain the movement keys and interaction through tapping mechanic. It's not implemented in the prototype yet.

QUEST STRUCTURE

This section showcases the quest line and explains the main contents that will take place under them.

Quest 1: Find out about the disappearance of the two princes at the Tower of London?
Player will be required to gain information about the events that occurred in the Tower of London by speaking with NPC's. The possible information gathered will revolve around the history of the victims, the events that followed, and any theories on a possible murder.

Quest 2: Find the letter
Player will hunt for a letter that contains possible evidence about the murder.

Quest 3: Find more INFO about Richard
Upon analyzing the contents of the letter, the player will need to inquire around about Richard, who was related to the victims.

Quest 4: Find another proof of the kids
Another proof will be required to ensure that the disappearance and murder was true. This will lead to the location of the bodies.

Quest 5: Scan the body location (Skippable if not present in the location)
The final objective is to deduce and scan the location where the bodies were found, which is the Bloody Tower.

The image below showcases a simple quest line, which is modified depending on the class chosen. The experience remains the same, and this flow chart was crafted in the early stages of quest development.
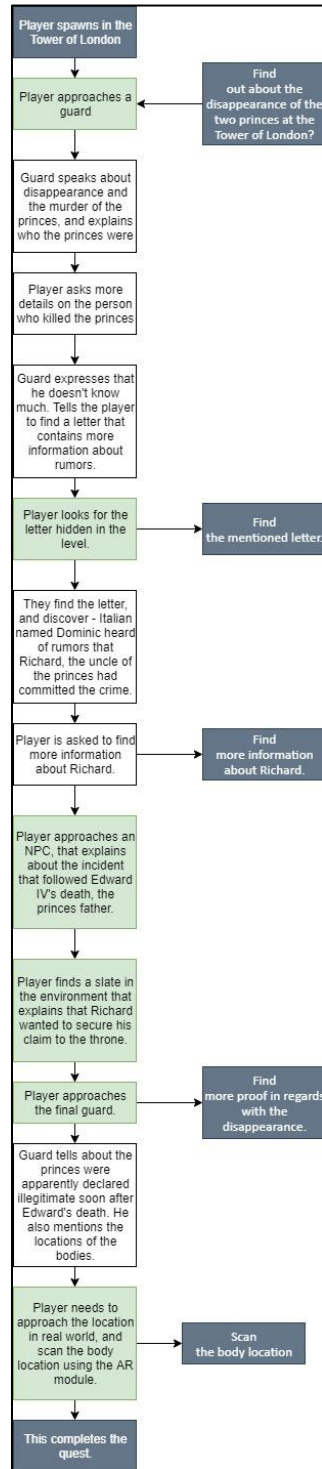

Figure 4: Event sequence

The following table will showcase the impact each class has on the game, and the way it changes. The highlighted parts are sections that have a significant difference.

The highlighted parts are the differences in the level, depending on the class.

MAIN QUESTS	PLAYER CLASS AND THE ACTIONS AVAILABLE		
	Planner	Collector	Social
Find out about the disappearance of the two princes at the Tower of London?	- Player goes to a guard and inquires - Guard tells the player about the murders that took place at the tower - He explains that the victims belonged were the two princes of Edward IV. - Player asks – who might have committed them? - Guard tells, he doesn't know much, but asks the player to look for a letter, which contains details about a rumor.	- Player goes to a guard and inquires - Guard tells the player about the murders that took place at the tower. - He explains that the victims belonged were the two princes of Edward IV. - Player asks – who might have committed them? - Guard tells, he doesn't know much, but asks the player to look for a letter, which contains details about a rumor.	- Player is paired with another companion present on site before the game begins. - Player goes to a guard and inquires - Guard tells the player about the murders that took place at the tower. - He explains that the victims belonged were the two princes of Edward IV. - Player asks – who's might have committed them? - Guard tells, he doesn't know much, but asks the player to look for a letter, which contains details about a rumor.
Find the mentioned letter.	- Player looks for the letter in the environment - Finds the letter - Speaks of Dominic Mancini – his accounts – he	- Player looks for the letter in the environment. - Finds the first piece and is required to find 2 more pieces.	- Player looks for the letter in the environment. - Player is required to scan two possible

	speaks of the massacre that Richard committed.	- Finds and compiles the letter - Speaks of Dominic Mancini – his accounts – he speaks of the massacre that Richard committed.	locations of the letter. - The companion helps in finding the second location. - Finds the letter - Speaks of Dominic Mancini – his accounts – he speaks of the massacre that Richard committed.
Find more information about Richard.	- NPC tells about the incidents that followed Edwards IV death, and about Richard wanting to secure his claim to the throne. - NPC points at a slate on the wall that contains info about Richard. - Player approaches and reads.	- NPC tells about the incidents that followed Edwards IV death, and about Richard wanting to secure his claim to the throne. - NPC points at a slate on the wall that contains info about Richard. - Player approaches and reads.	- NPC tells about the incidents that followed Edwards IV death, and about Richard wanting to secure his claim to the throne. - NPC points at a slate on the wall that contains info about Richard. - Player approaches and reads.
Find more proof in regards with the disappearance.	- Finds a guard that speaks of princes being declared soon after Edward IV's death. illegitimate. - He mentions the location where their bodies were found.	- Finds a guard that speaks of princes being declared soon after Edward IV's death. - He mentions hints about the location where their bodies were found - Player looks for possible locations – 3 are available.	- Finds a guard that speaks of princes being declared soon after Edward IV's death. - He mentions 4 possible locations where their bodies might have been found. - The player is required to

		- Player must match the location based on the hint received.	scan all these locations to reach the final clue. - The companion will help in scanning locations.
Scan the body location	- The game prompts the player to approach the Bloody Tower. - The player is required to scan an object present in the physical location.	- The game prompts the player to approach the Bloody Tower. - The player is required to scan an object present in the physical location.	- The game prompts the player to approach the Bloody Tower. - The player is required to scan an object present in the physical location.
- **SCENARIO COMPLETED**			

As the player completes the level, depending on their completion time, they are awarded badges and scores.

GLIMPSES FROM THE PROTOTYPE

The following images showcases the "Planner" class quest line, where the player approaches a guard for more information, locates the letter in the environment, and returns to another guard for later quest.

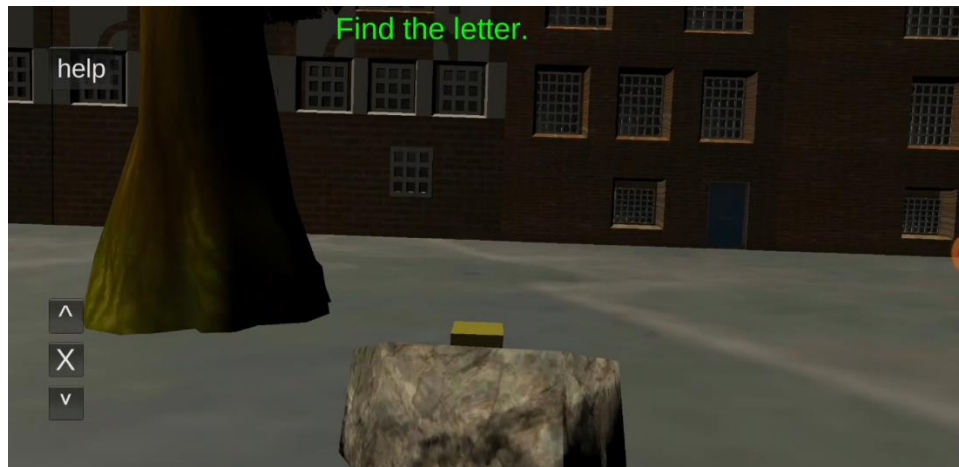
Figure 5: Quest 1 - Speak with guard

Figure 6: Quest 2 - Find the letter

Figure 7: Quest 3 - Return to the guard

GAME REWARDS

WINNING CONDITION

The game does not have any losing condition, since the design is oriented towards keeping the experience relaxed. To complete a scenario, players must complete the given quests. Upon finishing this, the time taken to complete the whole scenario is considered and calculated accordingly.

BADGES

Badges are awarded to players to ensure that their performance is recognized. Depending on the player class chosen and the time taken, the awards are as follows.

1. Platinum – The quickest completion rate – Top scorer
2. Gold – Good completion rate – High scorer

3. Silver – Medium completion rate – Average scorer
4. Bronze – Participation/low completion rate

| Figure 8: Platinum | Figure 9: Gold | Figure 10: Silver | Figure 4: Bronze |

REAL LIFE ADVANTAGES

In future expansions of the app, having an update where the rewards and scores earned after completion of game scenarios are translated into real world rewards, would help grow the usage and benefits of the app.

The real-life advantages could include

- Discount codes for visiting other historical locations.
- Unlocking more types of player classes (if this is developed – currently the app has 3)
- Vouchers for purchasing goodies from historical location gift shops.

These are a few feasible rewards that can be implemented if the app is further explored and developed.

JOURNEY MAP

A map is also provided as an extra feature for the users/players to track their journey, as it updates every time the user visits a location and completes the given quests. This map is not interactive, and is not implemented yet in the app.

GAME EXPERIENCE

The game intends to provide an immersive educational experience, that lets users/visitors of a heritage site remember the important events. Majority of the visitors forget about the significance of a place, and only the architecture is remembered through photographs.

But through the game, the visitors can play important scenarios, which help them remember important people, and the events connected to them. The objects and non-playable characters (NPC's) present in the game will help dispense the story in a manner that will be relatable, that is, through simple dialogues, and observation of objects.

The game also intends to provide a session, that will bring out the inner love for history and investigation. This is the reason behind crafting three player classes as well, since users can play a game

at the pace they want. This also will help increase the replayability factor, since one scenario can be experienced through three different classes.

GAMEPLAY MECHANICS

The game is simple and light on the mechanics and interactions so that the players can concentrate on the learning and fun aspect of the experience.

1. **Movement**
   a. The player can move around in the level to explore their surroundings.
   b. This can be done via tapping.
2. **Interaction – NPC's and Objects – Tap based**
   a. Player can interact with NPC's or objects present in the game. This initiates a dialogue, which either gives a piece of information or a new quest.
3. **Using camera to scan objects**
   a. The game requires scans of the physical environment, which is an optional feature in case the player is not physically present on the sight.

FUTURE PLANS

- For further expansions of the game, more scenarios can be added to each location. These scenarios can be purchased to play out, for real-world rewards.
- Special badges can be made available for expansions. These badges can be awarded for monitoring different aspects of playstyle of each player.
- More types of player classes can be made available to further customize and cater to each type of player.

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UNITY PACKAGES

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