

# Mixed Reality Game Design

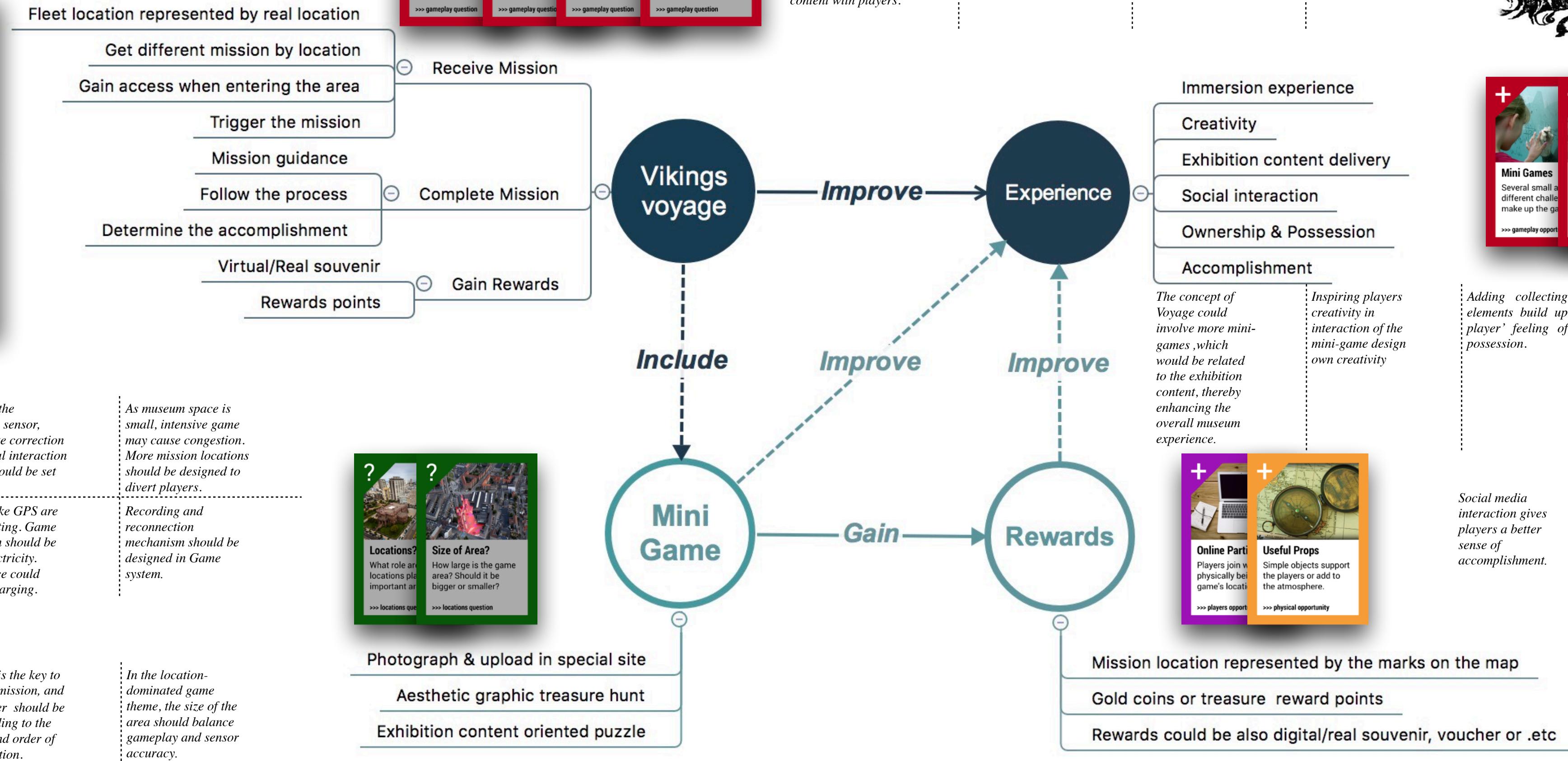
## Vikings voyage



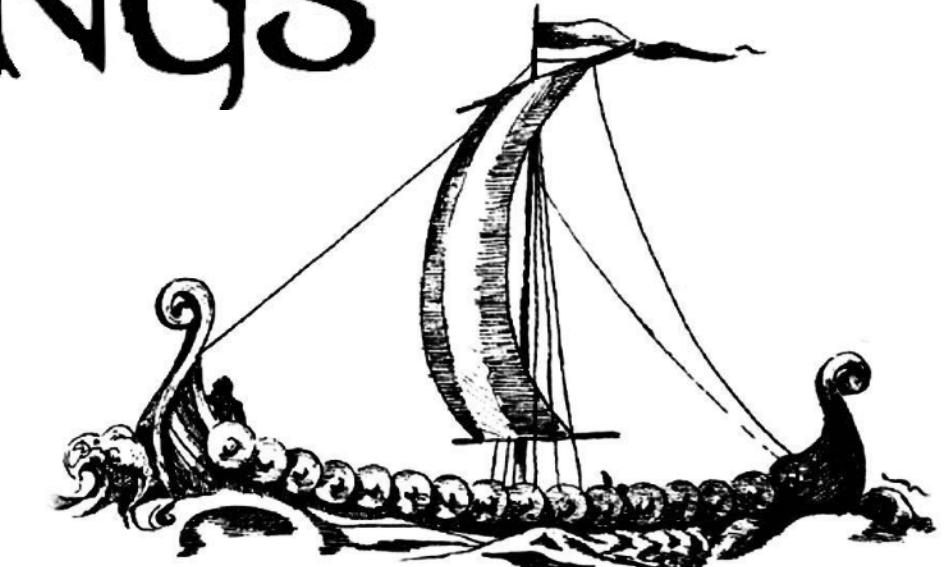
Avoid outdoor game missions in bad weather.

The museum experience should be more about the exhibition itself. The game should reduce the time on mobile device, and focus on exhibits.

Location is the key to trigger a mission, and the number should be set according to the content and order of the exhibition.



# Discover the VIKINGS



Sketch / 1

**NOTTINGHAM LAKE SIDE ARTS**

# Mixed Reality Game Design

## Vikings voyage

### Vikings voyage



Ran walk close to the museum ...



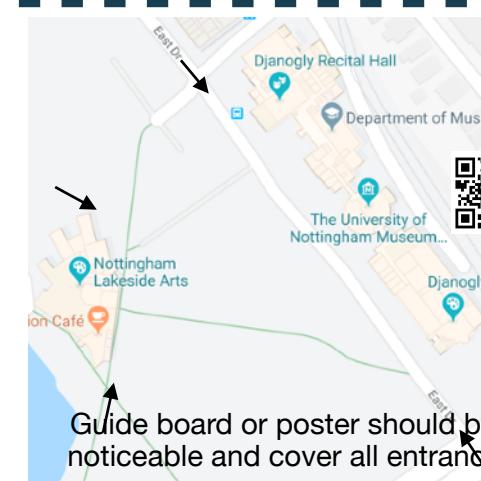
He get access to the game...



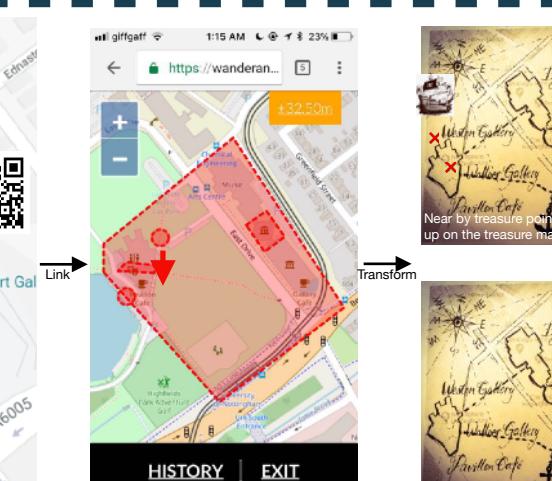
He goes toward the mini game location...

#### Game process — Starts & Give instructions

- Player's journey begin with walking close Lakeside arts, and he's going to explore different area.
- Player logs on the game application by scanning the QR code on the poster when he pass by the guide board. The application give players instruction.
- Players follows the instruction and play several mini-games while exploring the museum
- Factor:
  - 1.Player is on foot.
  - 2.Player doesn't know how to play the game.
  - 3.Player may don't know the way.
  - 4.There are many entrances and routes.



**Instructions & Interaction:**  
Player enters the game on Wander Anywhere. Mini game location display (as treasure) on the map which could give the navigation.  
Player interact with the marks on the map and gain instructions about the mini-game.



e.g., initially welcome page with instruction  
BACK

**Key design point - Mini game location and object of interest:**

The museum experience should be design as **object of interest**, e.g. **exhibits, related digital material, scenery or architecture...** And **viewpoint setting** should allow player fully view the exhibits without bothering other visitors. Game theme should base on the museum content as vikings.

**Mini Game**

Photostory / 2

**NOTTINGHAM LAKE SIDE ARTS** Mixed Reality Game Design Vikings voyage

## Graphic Treasure



Ran wanders around the trigger location to find the pattern.



He finds it and scan on Artcodes...



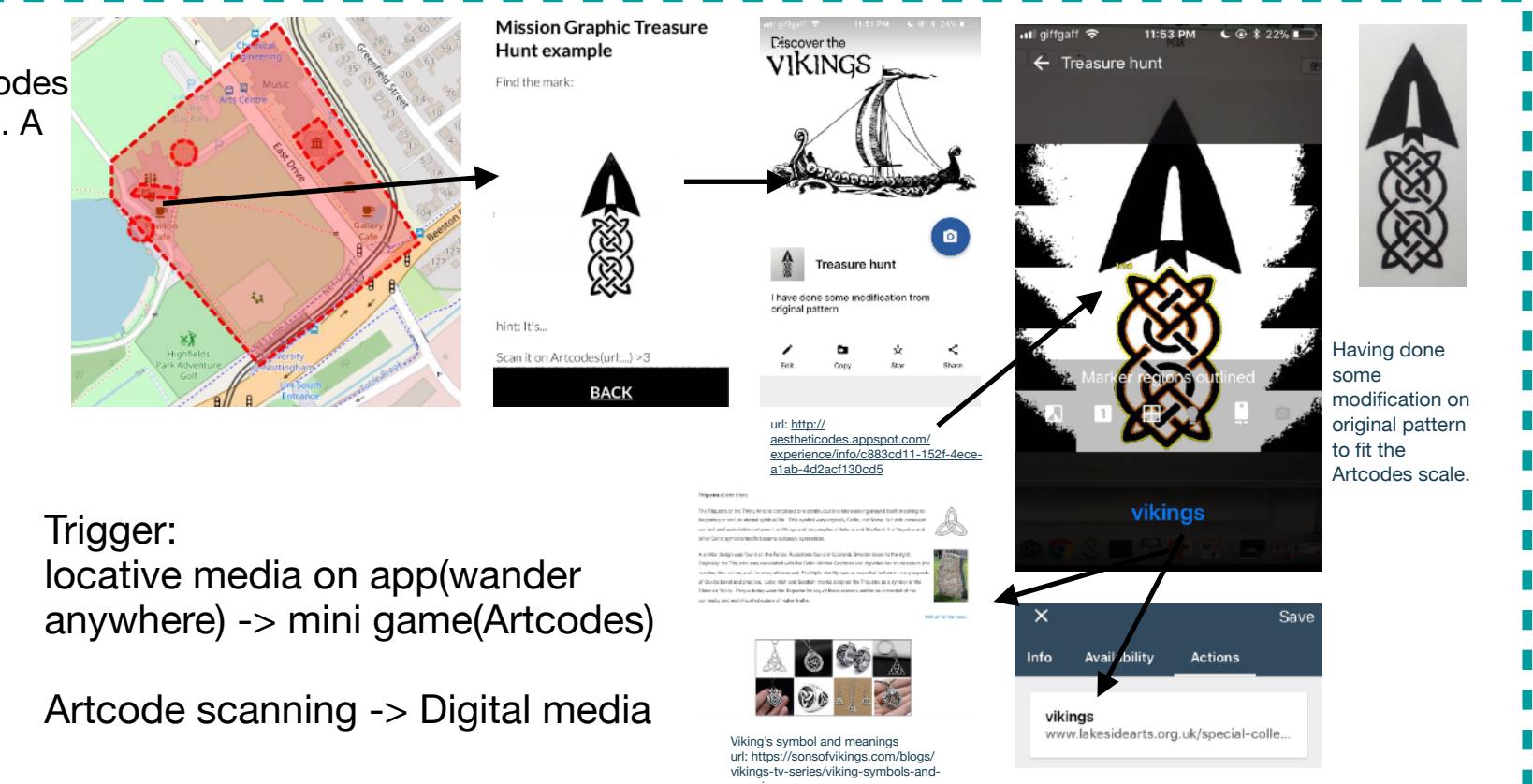
Look like a introduction to this section of exhibition...

- Game process — [Mini game] Find the Celtic pattern
- The instruction on the app lead player to mini game location.
- While player find the given pattern, he scan it on Artcodes.
- Artcodes trigger to short video about meaning of pattern and brief text introduction of exhibition.
- The mini-game rewards could be triggered when scanning successfully.
- When finishing viewing or just skipping, players continue the journey of reality museum exploring

**Factor:**  
1.Player may have no knowledge about Artcodes  
2.Player has interests in the exhibition theme. A brief introduction make sense for him.

**Challenge:**  
1.It's possible that player can't find the pattern.  
2.Players may not know how to scan on art codes.  
2.Scanning don't work for some reason. E.g. unclear image

**Solution:**  
1.A detailed navigation of graphic location could be a hint. More patterns in the location.  
2.A short guidance about scanning.  
2.Put more pattern in a visible condition



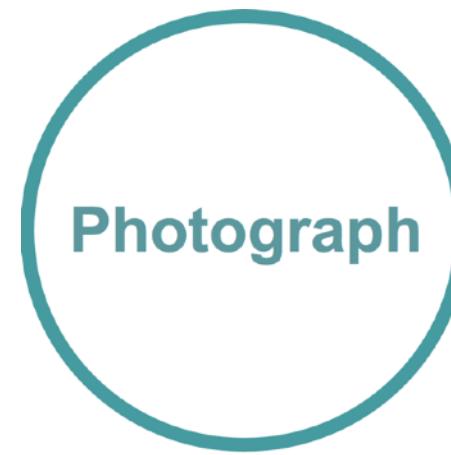
**Trigger:**  
locative media on app(wander anywhere) -> mini game(Artcodes)

Artcode scanning -> Digital media

## Vikings voyage

Photostory / 3

**NOTTINGHAM LAKE SIDE ARTS** Mixed Reality Game Design Vikings voyage



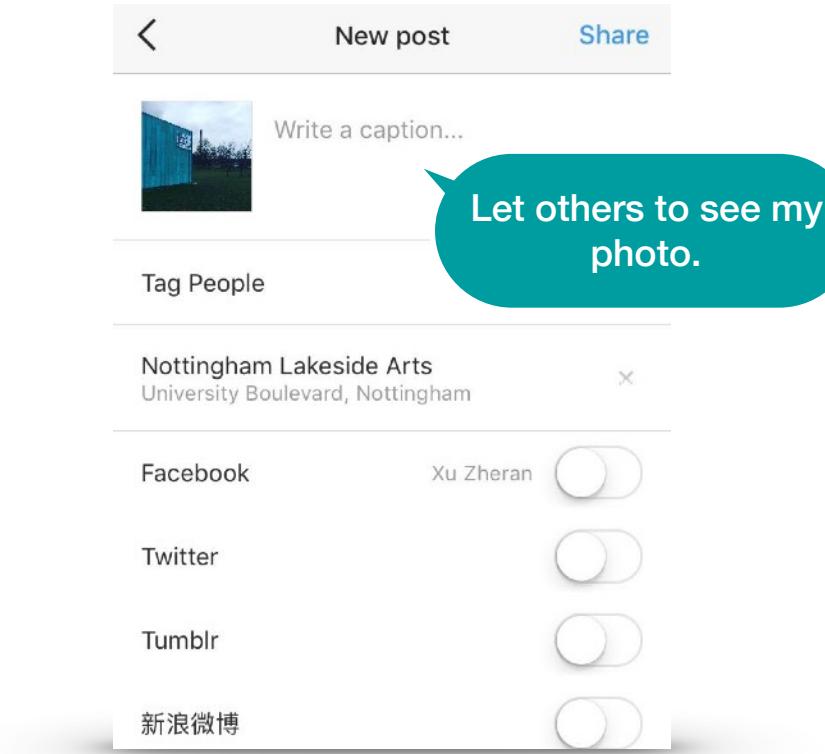
He view the photo gallery of the location scene uploaded by other visitors.



He shoot the point view at the location.



I wanna have a try and record the moment of view.



He post his photography on web-app and other social media .



## Photograph

Game process — [Mini game] Photograph and share

Player follow the instruction go to the location where are adorable scenery or architecture.

The gallery on the application provides other visitors' photography at the same location in different season and time.

Player could choose to take a photo and update to gallery

The mini-game rewards could be triggered after photographing.

When finishing viewing gallery or just skipping, players continue the journey of reality museum exploring.

### Factor:

1. Outdoor activities
2. Player has interests in taking photo.

### Challenge:

1. Bad weather
2. Safety issue

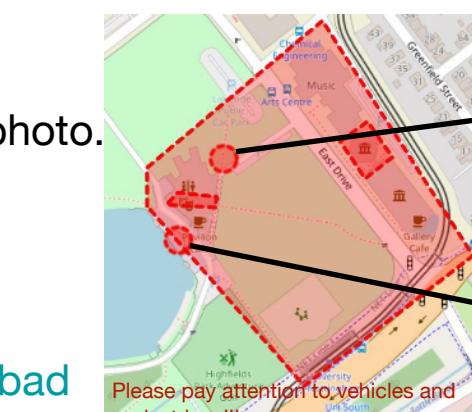
### Solution:

1. Cancel this mini-game when bad weather
2. Strict safe area control and keep reminding attention to safety.
3. Warning message

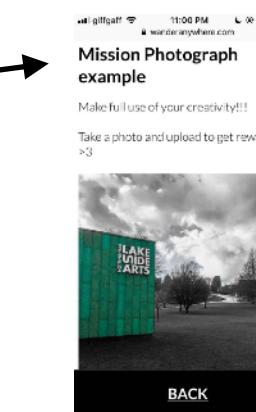
### Potential social media involvement:

As web application could connect to external applications, players have their account to interact with other players and share their experience to gain extra rewards.

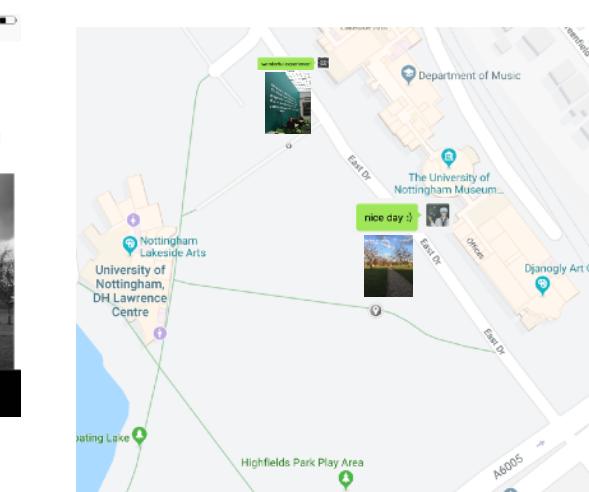
Player could also post treasure point by creating location gallery and pin it on the map,



The location trigger is wander anywhere or some other similar applications.



The gallery could be wonder anywhere's media or external applications.

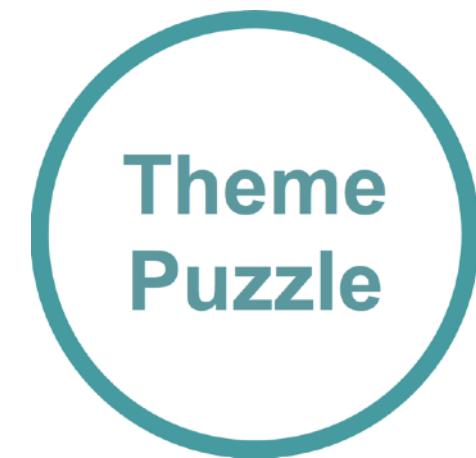


**Trigger:**  
locative media on app(wander anywhere) -> mini game(gallery)

Photostory / 4

# Mixed Reality Game Design

## Vikings voyage



He continues his journey to next theme...



He scan the QR code and open application.



He learn chess by doing puzzles...



- Game process — [Mini game] Learn to play hnefatafl
- Player get close to the board game under the guidance from the locative application.
- The QR code aside give access to the hnefatafl application.
- Player go through the tutorial by solving puzzles and learn to play the board game
- The mini-game rewards could be triggered after finishing.
- The instruction would be given that player who are keen on it could go to learning studio and have a real game.
- When finishing playing or skipping, players continue the journey of reality museum exploring.

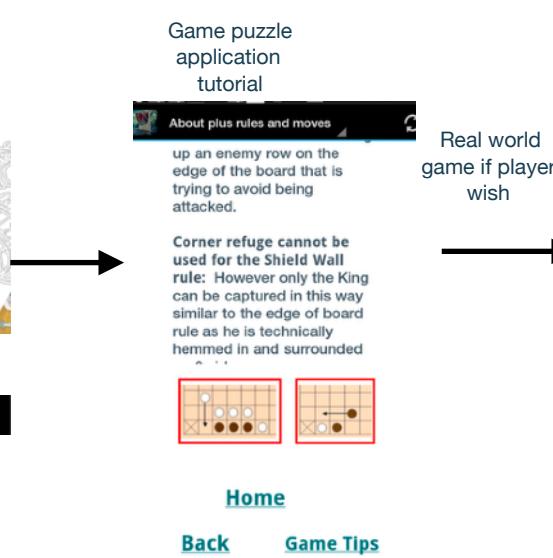
**Factor:**  
 1.Real item interaction  
 2.Exhibits content oriented

**Challenge:**  
 1.Avoiding taking long time  
 2.Keep journey smooth

**Solution:**

- 1.Game could be quickly skipped if players has no interests.
- 2.Appropriate extend for players who are keen on game.

It is possible that there would be too many players standing in front of the object and playing games. Locative media should lead some of them to the learning studio, where real chessboards are available.



**Trigger:**  
 locative media on app(wander anywhere) -> mini game  
 QR code on introduction cards -> boardgames

Photostory / 5