# Player <<Controller>>

- Find the QR code
- Add/remove the QR code
- Add/remove a photo
- Accept/decline the location
- Own the player's account
- Manage the profile, QR code
- Generate unique account

- Camera
- QR Code
- Account
- Map
- Database
- Photo

#### Account <<Module>>

- Show the scanned code
- Show player's personal information
- Show player's ranking
- Show score

Abstract

- Player
- Database
- Scoring System
- Ranking System

# Camera <<Controller>>

- Take location photo
- Take QR code photo

- Player
- Database
- Photo
- QR code

#### Photo <<Module>>

- Show QR code
- Show the location

- Camera
- QR Code
- Мар

### QR code <<Controller>>

- Represent a scannable code
- Generate QR code

- Camera
- Database
- Scoring System
- Мар
- Photo
- Admin

#### Database <<Controller>>

- Store the player's account
- Store the QR code, photo, location
- Store the location according to the QR code
- Store the score of QR code scanned by player

- Photo
- QR Code
- Player
- Scoring System
- Map
- Admin

#### Map <<Module>>

- Show the code's location
- Show the player's location
- Show available code
- Show the distance between player and QR code

- Database
- Player
- Photo
- QR code

# Scoring System <<Controller>>

- Calculate score for each QR code
- Calculate the total score
- Calculate the number of QR code scanned by player

- Photo
- QR code
- Database
- Ranking System

#### Admin <<Controller>>

- Delete malicious player
- Delete malicious QR Code
- Add new admin
- Limit the data amount for image

- Database
- Player
- QR code

# Ranking System <<Controller>>

- Rank player's score
- Rank the highest unique QR code
- Rank the total score of QR code
- Rank the total number of QR code scanned

- Account
- Scoring System
- Database