## Login Manager

| Responsibilities | Collaboration |
|---|---|
| Generate Login QR | Account |
| Login using Login QR | |
| ensure account security | |

## Game History

| Responsibilities | Collaboration |
|---|---|
| keeps history of player's game activity | Account |
| | Player |

## Game Stats

| Responsibilities | Collaboration |
|---|---|
| Summarize Stats of a Game History | Account |
| Can be viewed by other players | Game Stats QR Generator |
| stores rankings for account | Scoreboard |
| | Game History |

## Owner

| Responsibilities | Collaboration |
|---|---|
| Delete QR codes | Game QR codes |
| Delete Accounts | Account |
| View all QR codes | |
| View all Accounts | |

## Player

| Responsibilities | Collaboration |
|---|---|
| Use camera to take QR codes | Camera |
| Add QRs to Account | Profile |
| Manages Profile | Account |

## Account

| Responsibilities | Collaboration |
|---|---|
| Store a Profile | Player |
| maintain Profile | Profile |
| own QR codes | Comments |
| keeps game history | Login |

## Profile

| Responsibilities | Collaboration |
|---|---|
| Stores PFP | Account |
| Stores ID | Game Stats |
| Stores Contact Info | |
| Public - Can be viewed by other Players | |
| has Game Stats | |

## Profile QR generator

| Responsibilities | Collaboration |
|---|---|
| Generates QR code linking to a public Profile | Profile |

## Comments

| Responsibilities | Collaboration |
|---|---|
| Account Comments on Game QRs | Game QR code |
| | Accounts |

## Scoreboard

| Responsibilities | Collaboration |
|---|---|
| Rank QR codes given to it | Profile |
| Get hi score QR ranking from Game History | Account |
| Get scanned QR number ranking from Game History | |
| Get total score ranking from Game History | |

## Game QR codes

| Responsibilities | Collaboration |
|---|---|
| May have GeoLocation | GeoLocation |
| Can be Scanned | Player |
| Can be Owned by players | Comments |
| Have Comments from Players | Account |
| Has UID | |
| May have Image identifying the location | |
| keeps track of who scanned it | |

## GeoLocation

| Responsibilities | Collaboration |
|---|---|
| Stores GeoLocation information | Game QR codes |
| | GPS |

## GPS

| Responsibilities | Collaboration |
|---|---|
| Gets current Position as GeoLocation | Camera |
| Togglable | GeoLocation |

## Camera

| Responsibilities | Collaboration |
|---|---|
| Capture Images | Images |
| Resize / Compress large images | GPS |
| Capture location | |

## Image

| Responsibilities | Collaboration |
|---|---|
| Captured by Camera | Camera |
| Converted to QR code | Game QR Processor |
| Optionally part of Game QR code | Game QR code |

## Game QR Processor

| Responsibilities | Collaboration |
|---|---|
| Convert image into QR code | Images |
| Get Score from a Game QR code | Game QR code |
| Encode / Hash Game QR into UID? | |