

| Class Event   |  |
|---|--|
| Responsibility  | Collaborator   |
| <ul style="list-style-type: none"><li>• Store and manage Event details</li><li>• Track registration status and participants (waiting list and selected participants)</li><li>• Manage organizer information</li><li>• Decode and retrieve an image from a Base64-encoded string</li></ul> | <ul style="list-style-type: none"><li>• User</li><li>• WaitingList</li><li>• FirebaseManager</li></ul> |

| Class Notification  |  |
|---|--|
| Responsibility  | Collaborator   |
| <ul style="list-style-type: none"><li>• Represent notification data, including name, details, location, device ID, and event ID</li></ul> | <ul style="list-style-type: none"><li>• Event</li><li>• FirebaseFirestore</li><li>• User</li></ul> |

| Class EventManager   |  |
|--|--|
| Responsibility   | Collaborator   |
| <ul style="list-style-type: none"><li>• Send notifications to users about event status (e.g., selected for the event)</li><li>• Select a random user from the waiting list and move them to the chosen list for an event</li><li>• Update event data in Firestore, including moving users between the waiting and chosen lists</li></ul> | <ul style="list-style-type: none"><li>• Event</li><li>• FirebaseFirestore</li><li>• Notification</li></ul> |

| Class NotificationPreferenceManager  |  |
|--|--|
| Responsibility   | Collaborator   |
| <ul style="list-style-type: none"><li>• Manage user notification preferences by updating the Allow Notification field in the Firestore users collection</li><li>• Provide a method to set whether a user allows notifications or not</li></ul> | <ul style="list-style-type: none"><li>• User</li><li>• FirebaseFirestore</li></ul> |

| Class WaitingList   |  |
|---|--|
| Responsibility  | Collaborator   |
| <ul style="list-style-type: none"><li>• Manage the waiting list for events</li><li>• Add a user to an event's waiting list in Firestore</li><li>• Add a user to an event's chosen list in Firestore</li></ul> | <ul style="list-style-type: none"><li>• Event</li><li>• User</li><li>• FirebaseFirestore</li></ul> |

| Class FirestoreQueryHelper  |   |
|---|---|
| Responsibility  | Collaborator  |
| <ul style="list-style-type: none"><li>• Query Firestore to get entrant list data (accepted, chosen, declined) for a specific event</li><li>• Populate a list with the queried data and update the UI</li><li>• Query Firestore to get all events organized by a specific user</li><li>• Populate a spinner with event names for the user to select an event</li></ul> | <ul style="list-style-type: none"><li>• FirebaseFirestore</li></ul> |

| Class Facilities  |  |
|---|--|
| Responsibility  | Collaborator   |
| <ul style="list-style-type: none"><li>• Store and manage an organizers facility data (name, location, info, picture)</li><li>• Associate the facility with an event, for users to view the data</li></ul> | <ul style="list-style-type: none"><li>• FirebaseFirestore</li><li>• User</li><li>• Event</li></ul> |

| Class User   |   |
|--|---|
| Subclasses: Entrant, Organizer, Admin  |   |
| Responsibility   | Collaborator  |
| <ul style="list-style-type: none"><li>• Store user information (name, email, phone, account type, and device ID)</li></ul> | <ul style="list-style-type: none"><li>• Event</li><li>• WaitingList</li><li>• FirebaseFirestore</li></ul> |

| Class Entrant   |   |
|---|---|
| Superclass: User  |   |
| Responsibility  | Collaborator  |
| <ul style="list-style-type: none"><li>• Store user information</li><li>• Keep track of events current signed up for (waiting list or selected</li></ul> | <ul style="list-style-type: none"><li>• Event</li><li>• WaitingList</li><li>• FirebaseFirestore</li></ul> |

| Class Organizer   |   |
|---|---|
| Superclass: User  |   |
| Responsibility  | Collaborator  |
| <ul style="list-style-type: none"><li>• Store user information</li><li>• Keep track of events that the User has organized</li></ul> | <ul style="list-style-type: none"><li>• Event</li><li>• WaitingList</li><li>• FirebaseFirestore</li></ul> |

| Class Admin   |   |
|---|---|
| Superclass: User  |   |
| Responsibility  | Collaborator  |
| <ul style="list-style-type: none"><li>• Store user information</li><li>• Allows user to have administrative powers over events, facilities etc.</li></ul> | <ul style="list-style-type: none"><li>• Event</li><li>• WaitingList</li><li>• FirebaseFirestore</li></ul> |