Design Presentation

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Business requirements

- Make it easier for volunteer hours to be validated

- Extend the Betterflye platform to a larger audience via mobile applications

Use cases

- Check-in to initiatives (Volunteer self check-in)

- Check-in to initiatives (Initiative Manager checks in volunteers)

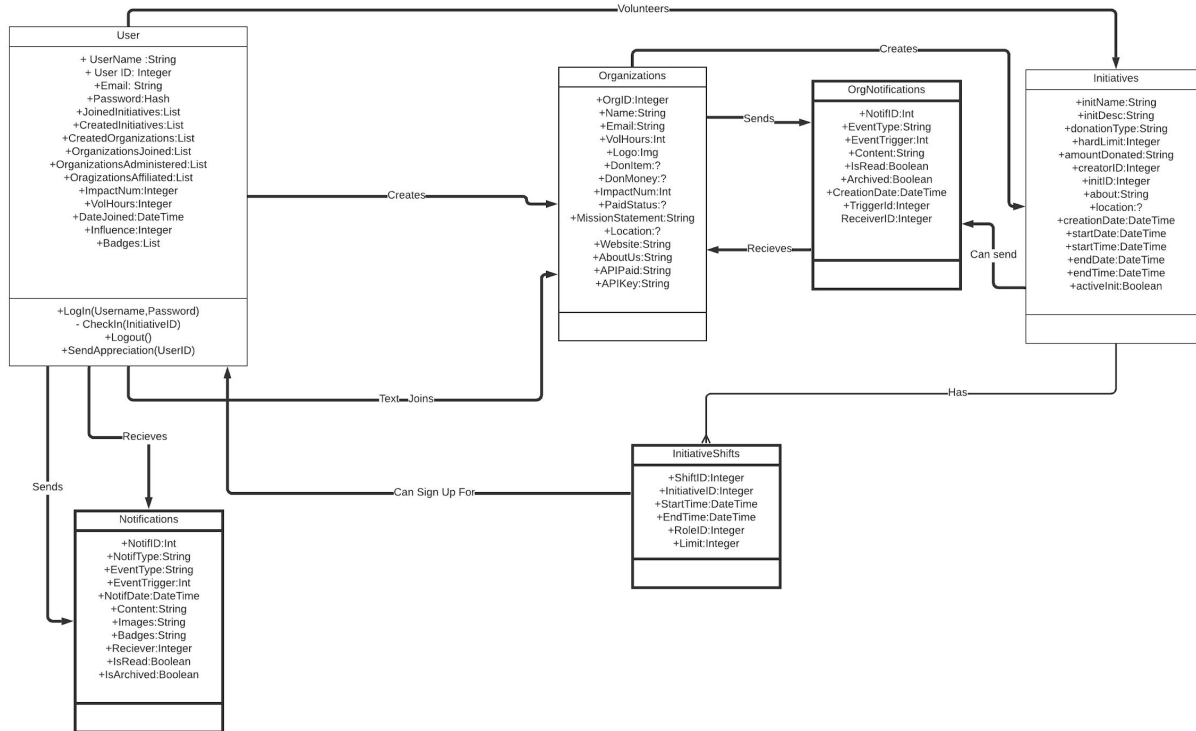- Scan a users QR Code to send appreciations

Requirements

Examples of our Functional Requirements:

- A volunteer must have a QR Code associated with a unique identifier
- The application must allow users to send appreciations to each other

Examples of our Non Functional Requirements:

- The app needs to be accessible on iOS and Android
- The buttons and text need to meet accessibility standards

Domain Model

User
+ UserName :String
+ User ID: Integer
+Email: String
+Password:Hash
+JoinedInitiatives:List
+CreatedInitiatives:List
+CreatedOrganizations:List
+OrganizationsJoined:List
+OrganizationsAdministered:List
+OragizationsAffiliated:List
+ImpactNum:Integer
+VolHours:Integer
+DateJoined:DateTime
+Influence:Integer
+Badges:List

+LogIn(Username,Password)
- CheckIn(InitiativeID)
+Logout()
+SendAppreciation(UserID)

Organizations
+OrgID:Integer
+Name:String
+Email:String
+VolHours:Int
+Logo:Img
+DonItem:?
+DonMoney:?
+ImpactNum:Int
+PaidStatus:?
+MissionStatement:String
+Location:?
+Website:String
+AboutUs:String
+APIPaid:String
+APIKey:String

OrgNotifications
+NotifID:Int
+EventType:String
+EventTrigger:Int
+Content:String
+IsRead:Boolean
+Archived:Boolean
+CreationDate:DateTime
+TriggerId:Integer
ReceiverID:Integer

Initiatives
+initName:String
+initDesc:String
+donationType:String
+hardLimit:Integer
+amountDonated:String
+creatorID:Integer
+initID:Integer
+about:String
+location:?
+creationDate:DateTime
+startDate:DateTime
+startTime:DateTime
+endDate:DateTime
+endTime:DateTime
+activeInit:Boolean

Notifications
+NotifID:Int
+NotifType:String
+EventType:String
+EventTrigger:Int
+NotifDate:DateTime
+Content:String
+Images:String
+Badges:String
+Reciever:Integer
+IsRead:Boolean
+IsArchived:Boolean

InitiativeShifts
+ShiftID:Integer
+InitiativeID:Integer
+StartTime:DateTime
+EndTime:DateTime
+RoleID:Integer
+Limit:Integer

Volunteers
Creates
Creates
Sends
Recieves
Can send
Text Joins
Recieves
Sends
Can Sign Up For
Has

made with mematic

TechStack

- PHP

- Xamarin Forms

- MonkeyCache

- MySQL

- Docker

Prototype

First Iteration Features

- Create starting menu view model
- Create Login or Create Account view
- Implement user login view model
- Create the user login view
- Implement User Registration ViewModel
- Create User Registration View
- Create QR Code View for Volunteer
- Implement QR Code functionality inside the Volunteer QR Code ViewModel

Mentor/Client Feedback

- Mentor
  - Removed first person pronouns from documents
  - Badges no longer needed in domain model
- Client
  - Remove first person pronouns from documents
  - Add basic "User" to list of actors