

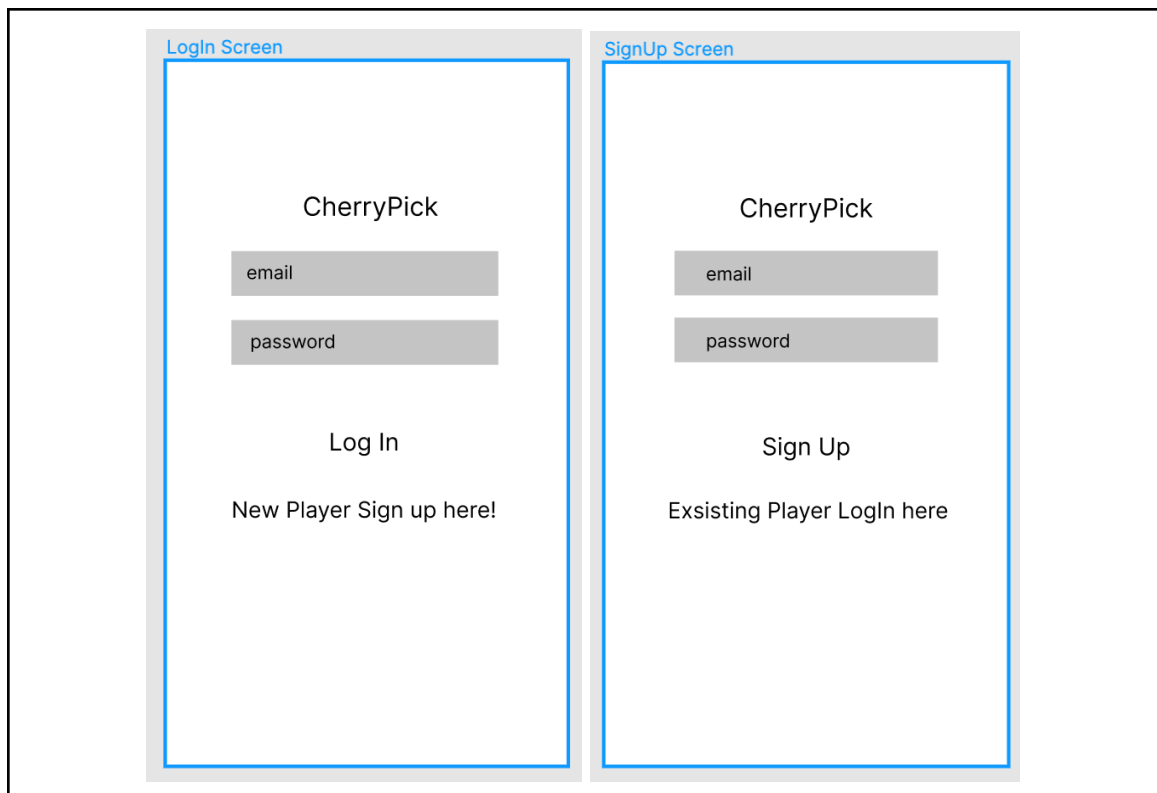
CSC780 - Application Development for Mobile Devices, Spring 2022
Final Project Proposal by
Jasmine Jahan, SFSU ID 920115557

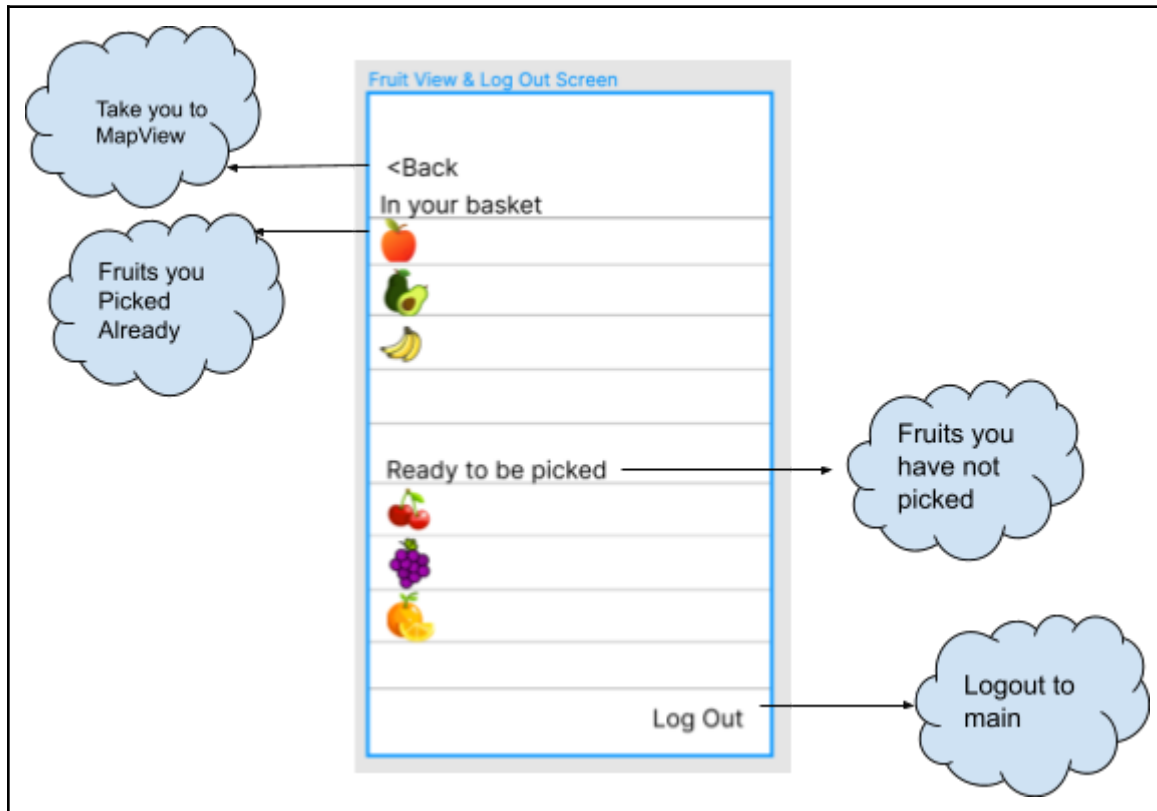
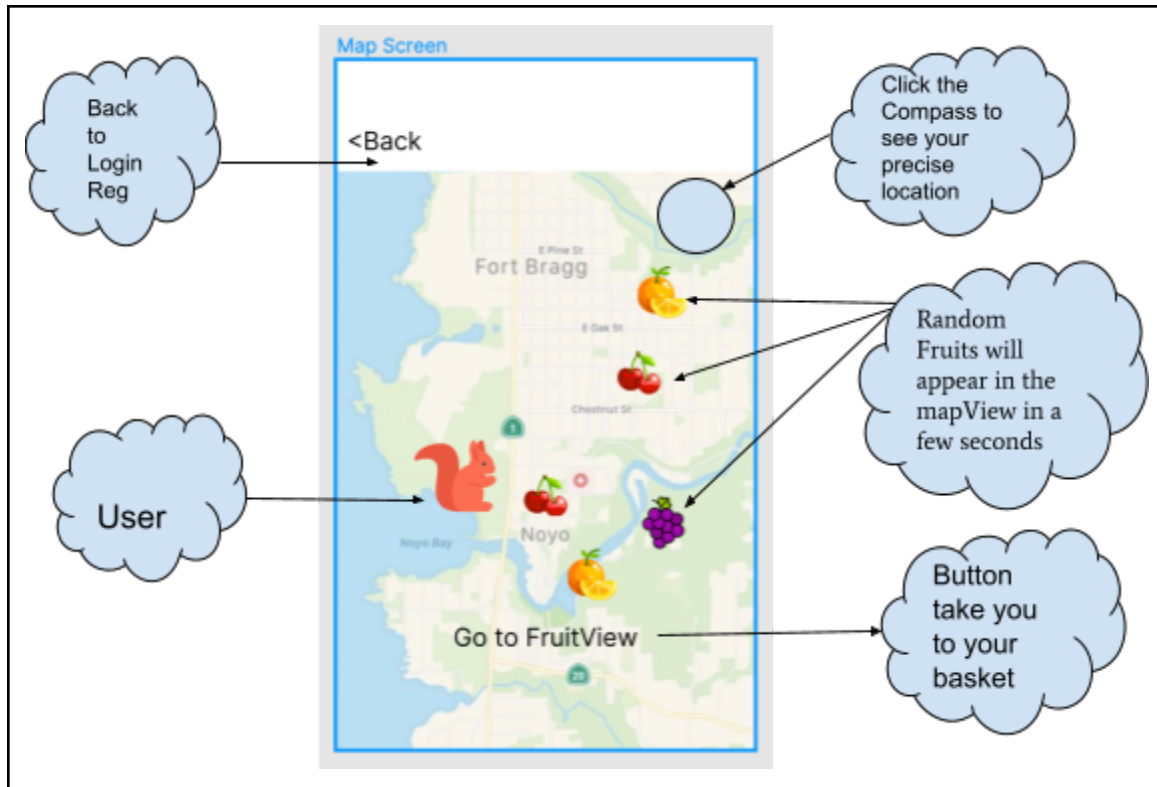
Project Name: CherryPick (An iOS Application)

- **Executive Summary:**

The mobile application 'CherryPick' has been developed with GPS direction where users can play a fruit picking game using location from anywhere in the world. Users will be able to have more fun playing the game while visiting various places.

- **Basic wire-frames for Functional Features (Prototyping in Figma):**





- **Functional Features(Must have)**

1. Users shall be able to LogIn, Register & Logout for the mobile application.
2. Registration & Login shall include emailId and password fields.
3. Users shall receive alerts pop up about the invalid emailId & password length.
4. Users shall be able to view real-time Map directions and trace their location.
5. Users shall be able to pick fruits at a specific/nearby distance.
6. Users shall be able to switch between screens via the back button.
7. Users shall be able to see a list of fruit items including both picked and unpicked.
8. Users shall be able to turn on the location only when playing the game.
9. Google analytics shall be used.
10. Firebase Authentication shall be used in Login, and Registration process.

- **Non Functional Features(Nice to have)**

1. Multiple players shall be competing.
2. The language used shall be localized.

- **High-level system architecture and Technology stack:**

Operating System: macOS Monterey 12.3.1	Language: Swift
Mapping Technology: Apple Maps	UI Frameworks: UIKit
Architecture Pattern: MVC	Framework: CoreData
Testing/Debugging: iOS Simulator	IDE: Xcode
Version Control System: Github	Backend: Firebase
Dependency Management: CocoaPods pod 'FirebaseAnalytics', pod 'FirebaseAuth'	

- **Resources credit :**

1. <https://firebase.google.com/docs/ios/setup>
2. <https://github.com/firebase/quickstart-ios/blob/3daa18206fb9438a2e5ee1c9f1996d5224a9792a/authentication/LegacyAuthQuickstart/AuthenticationExampleSwift/EmailViewController.swift#L173-L184>

3. <https://www.youtube.com/watch?v=LE-wTJbMugA&list=WL&index=19>
4. <https://www.udemy.com/course/ios-12-developer-course/>
5. https://www.youtube.com/watch?v=l-8S_8hPhbg
6. <https://www.youtube.com/watch?v=9fKcNpOiMFY&t=3s>
7. <https://www.youtube.com/watch?v=f6xN2MuHv1s>
8. <https://stackoverflow.com/questions/37943616/firebase-sign-out-not-working-in-swift>
9. <https://stackoverflow.com/questions/54966240/createnewuser-firebase-method-is-returning-nil-in-the-closure-for-user-uid>
10. <https://stackoverflow.com/questions/67119084/how-do-i-fix-cannot-find-firebaseapp-in-scope>
11. <https://stackoverflow.com/questions/69352212/you-may-have-encountered-a-bug-in-the-ruby-interpreter-or-extension-libraries>
12. <https://stackoverflow.com/questions/27785467/black-screen-after-presenting-modal-view-controller-in-current-context-from-uita>
13. <https://stackoverflow.com/questions/64073811/authorizationstatus-for-cllocationmanager-is-deprecated-on-ios-14>