Mobile Systems for Institute of Human Origins

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ASU Institute of Human Origins
Arizona State University

Objective

- Develop Version 2 of Android and iOS Applications for ASU Institute of Human Origins (IHO) to receive dynamic updates from IHO server.
- Design a Desktop-based application for the IHO Admin to modify the dynamic contents on Mobile Apps like News, Events, Lecturers and Gallery.
- Incorporate design & layout changes in the existing Mobile Apps as suggested by the Customer.
- Migrate Objective C code to Swift 3 for iOS App and upgrade Android API level to 23 (6.0 Marshmallow)
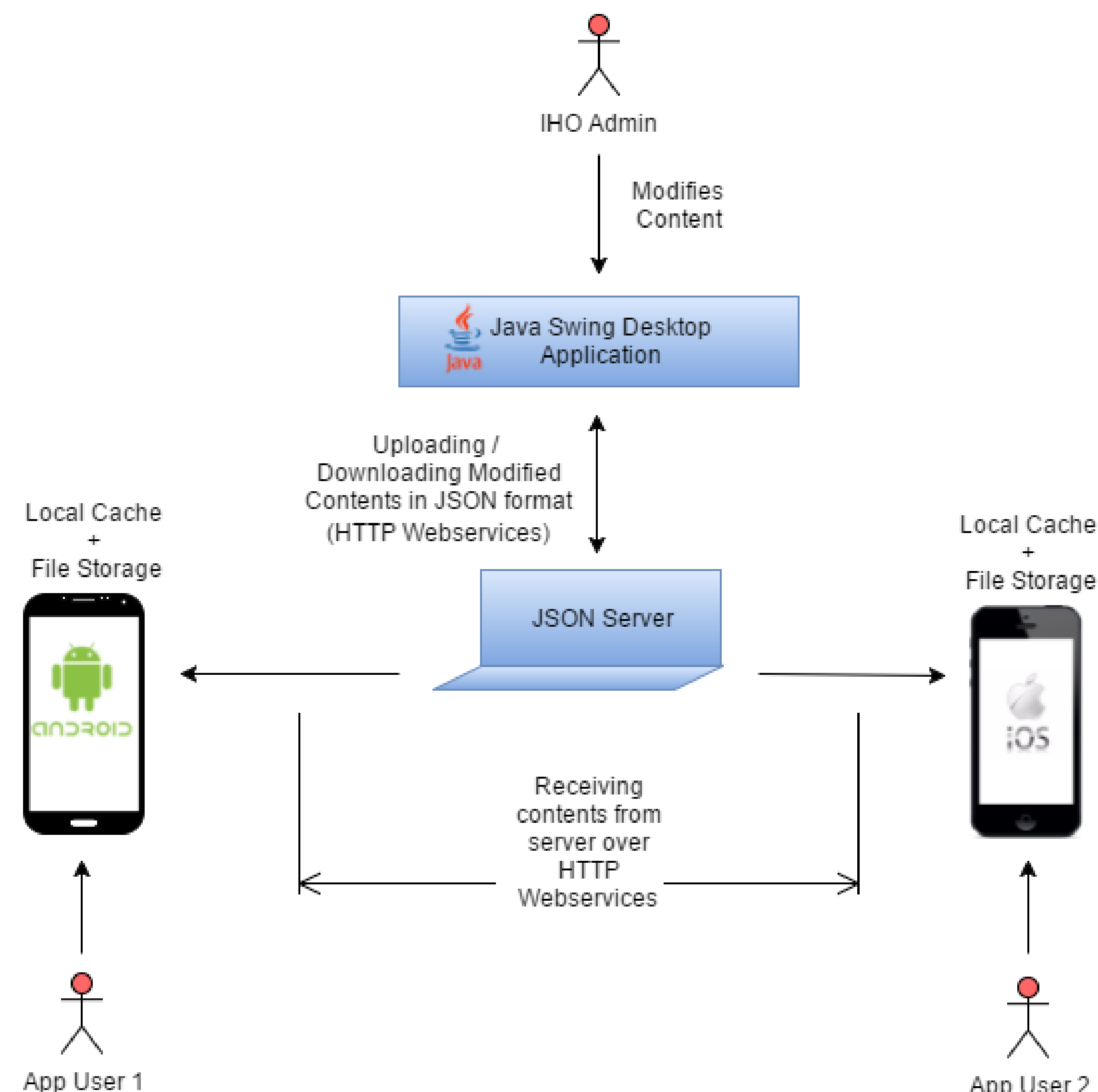
About the Department

- The Institute of Human Origins is one of the preeminent research organization in the world devoted to the science of human origins.
- IHO pursues an integrative Strategy for research and discovery central to its over 30-year-old founding mission, bridging social, earth, and life science approaches to the most important questions concerning the course, causes, and timing of events in the human career over deep time.
- The Institute of Human Origins is a research center of the College of Liberal Arts and Sciences in the School of Human Evolution and Social Change at Arizona State University.

Supported Versions and Devices

- Android: API Level 19 or above; Version 4.4 KitKat or above (On all screen sizes) - Target API: Version 6.0
- iOS: Version 8 or above (iPhone 5, 5s, 6, 6s, 6s Plus, 7, 7 Plus)
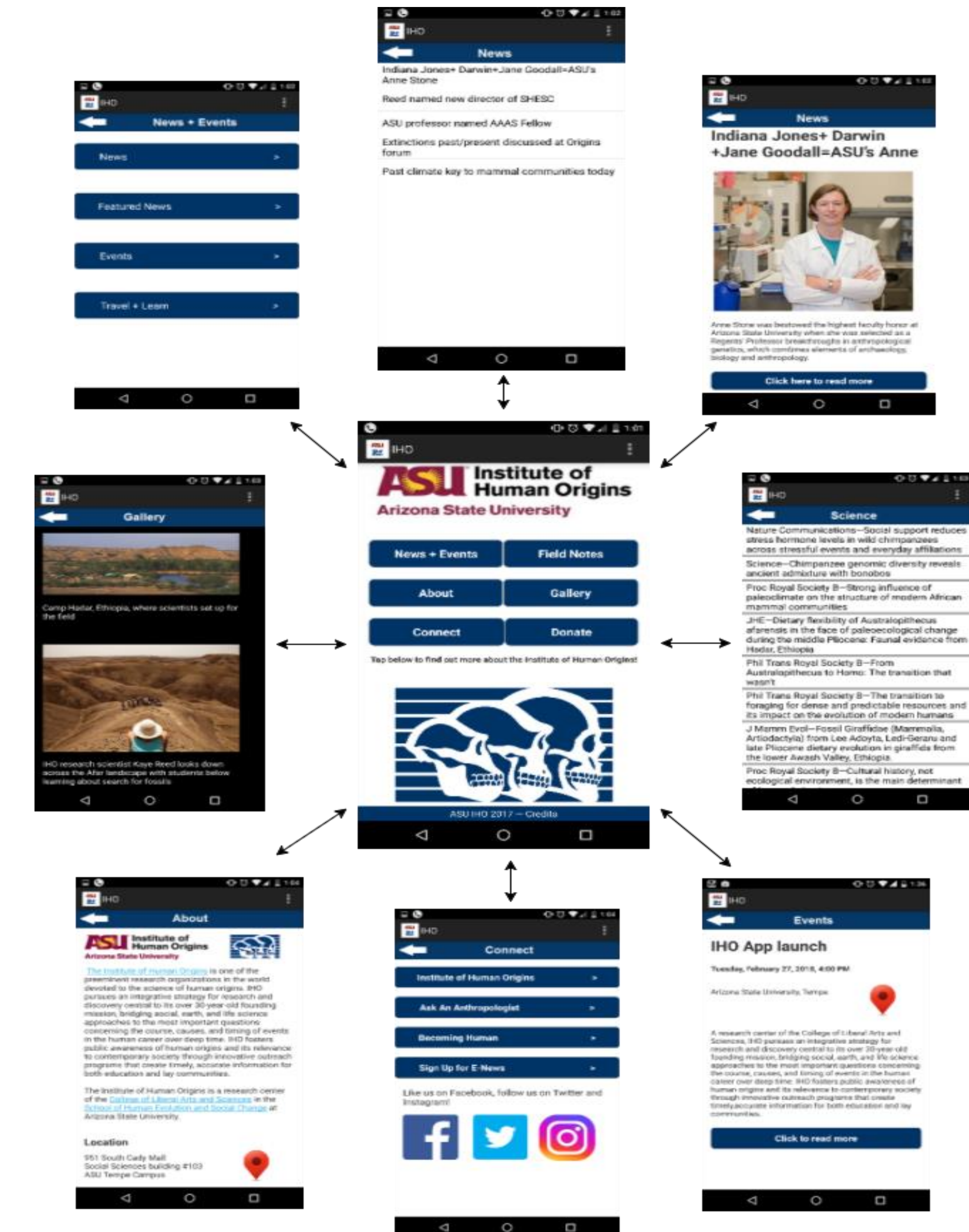- Java Swing: Java 7 and above (Windows 7 & above, MAC, Linux)

Architecture

IHO Admin

Modifies Content

Java Swing Desktop Application

Uploading / Downloading Modified Contents in JSON format (HTTP Webservices)

Local Cache + File Storage

JSON Server

Local Cache + File Storage

Receiving contents from server over HTTP Webservices

App User 1

App User 2

Tools and Technologies

Android Studio · Swift 3 · Xcode · Android · eclipse · RESTful API (GET PUT POST DELETE) · Java · {JSON} · iOS

Mobile Application Layout

Committee and Team Members

- **IHO Coordinator:** Julie Russ
- **Faculty Advisors:** Dr. Timothy Lindquist, Prof. Richard Whitehouse
- **Development Team:** Arpit Jaiswal (iOS) Gowtham Nayak (Swing), Mihir Bhatt (Android), Senthamil Sindhu (Swing), Sweta Singhal (iOS)