

# **MOBILE SYSTEMS FOR INSTITUTE OF HUMAN ORIGINS SOFTWARE PROJECT CHARTER**

Software Factory Project  
Department of Software Engineering - CIDSE  
Arizona State University, Polytechnic  
Version 2.0

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# Revision History

Name	Date	Reason For Changes	Version
Project Charter	2 <sup>nd</sup> Nov 2016	Initial Draft	1.0
Project Charter Detailed	9 <sup>th</sup> Nov 2016	Detailed version of the document on the basis of template.	2.0

## 1. INTRODUCTION

This is the project charter document for ASUIHO project sponsored by ASU Institute of Human Origins Department. This project is taken by team HackSlash. The team is comprised of graduate student majoring in software Engineering at Arizona State University. Student are enrolled in a two semester culminating experience project course required for all graduate majors. Successful delivery of the desired software product will fulfill the graduate level culminating experience required for the student team.

Name	Role	Title	Email	ASU ID
Timothy Lindquist	Project Sponsor	Faculty Advisors	Timothy.lindquist@asu.edu	-
Richard Whitehouse	Project Sponsor	Faculty Advisors	row@asu.edu	-
Julie Russ	Project Sponsor	IHO Coordinator	jruss@asu.edu	-
Arpit Jaiswal	Application developer	iOS Developer	arpit.jaiswal@asu.edu	1209386877
Gowtham Nayak	Application developer	Swing Developer	gnayak2@asu.edu	1209419260
Mihir Bhatt	Application Developer	Android Developer	Mihir.bhatt@asu.edu	1209422146
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**1.1 Purpose** The purpose of this document is to outline the project objectives. Identify the main stake holder and define the authority of project manager.

**1.2 Scope** The scope of this document is to outline the sponsor's needs, work schedule, gather the resource requirements, analyze cost and define quality assurance standards.

### 1.3 Definitions, Acronyms and Abbreviations.

IHO - Institute of Humans Origin

### 1.4 References

- **Slack:** Join our Slack team with your [@asu.edu](mailto:@asu.edu) email:  
<https://ser517team.slack.com/signup> □ □ □ □
- **Github:** <https://github.com/swetasinghal28/IHO>
- **Taiga:** <https://tree.taiga.io/project/swetasinghal28-iho/>

## 2. PROJECT SPONSOR AND SPONSOR NEED

The department of Human Origin needs aims at bridging social, earth and life approaches to the most important question concerning the course cause and timings of events in the human career over the deep time. Toward this direction the sponsor needs us to build a Mobile Application on Android and iOS which helps it to better serve its purpose. This mobile application will have several screens which provide information regarding News and Events, Field notes, Gallery for showcasing the research work accomplished so far etc.

### 2.1 Sponsor Identification

Arizona State University, Institute of Human Origin Department is the sponsor of the project. Primary contact in the department is Dr. Julie Russ. Dr. Timothy Lindquist and Richard Whitehouse of Software Engineering Department will be our faculty advisor for the project.

### 2.2 Sponsor Business

IHO blended high-profile field and analytical research on the early human fossil record with public outreach programs promoting the scientists as the best interpreter of their research for the public. This project solves the purpose of spreading the research and new idea of various scientist of the department. It helps introducing the research work at various conferences.

### 2.3 Description of Needs

Design a native application on Android & iOS for the ASU Institute of Human Origins (IHO). We are also required to build a desktop application based on Java Swing that can make changes to the content of the application like News feeds, Event details, Gallery of recent finding and information on various scientist. Facilitate users to view the content and information provided by ASU IHO offline.

### Components of Project:

- a) Android Mobile application.
- b) iOS Mobile Application.
- c) Desktop Application on Java Swing.
- d) Central server for information sync.

#### **2.3.1 Project Vision**

The department of Human Origin needs aims at bridging social, earth and life approaches to the most important question concerning the course cause and timings of events in the human career over the deep time. Toward this direction the sponsor needs us to build a Mobile Application on Android and iOS which helps it to better serve its purpose. This mobile application will have several screens which provide information regarding News and Events, Field notes, Gallery for showcasing the research work accomplished so far etc.

The expectation is to deliver an app on both the platforms with smooth transition between different pages. The app should be designed keeping in mind that user should have easy access to the necessary pages. Also it is necessary to redirect the user from the application to the IHO web page form within the app when necessary. This benefits both the user and the Institute of Human Origin since the web page can get more web views and the user can get comprehensive information about the Institute.

#### **2.3.2 Goals**

Primary goal of this project is to:

- a) To develop and deliver software system for the Institute of Human origins department to benefit the project sponsor in spreading the news and various information gathered by the institute. This project will deliver mobile applications that are easy to manage and update.
- b) This will be a learning curve for the student team in terms of working in a group project, working with the sponsor, enhance our technical knowledge and apply various software engineering principles.

#### **2.3.3 Success Criteria**

- a) Successfully test connection of both the Mobile application with Desktop application for updating the content of the mobile.
- b) Android application should be available on PlayStore and iOS application should be available in the Apple app store for public to download. This application will be first showcased in a conference held at Department of Arts at Arizona State University on 8th April 2017.

### 3. MANAGEMENT PROPOSAL

#### 3.1 Work Schedule

We intended to use Agile Methodology. We have divided the projects into modules, each module is divided into numerous tasks, each task will fulfill certain functionalities. We are using different tools like Taiga to track the tasks and its progress. The code is maintained in a central GIT repository.

Project Authorization Date: October 27th 2016

Project Start Date: October 31st, 2016

Project Completion Date: April 29, 2016

Project Deliverable:

1. Project Charter
2. Project Management Plan
3. Software Requirement Specification
4. Software Design Specification
5. Project Prototype
6. Android Application
7. iOS Application
8. Desktop Application
9. User Manual
10. Software Test Report

The Software Development Life Cycle is divided into 9 phases

Software Development Lifecycle Phases	Phase Deliverable
Establish the vision and scope of the project	Project Charter
Develop and define the project management plan	Project Management Plan
Elicit, analyze, specify, validate and publish the requirement specifications	Software Requirements Specification
Design the software	A) Software Design Specification B) Desktop Application Prototype
Implement the software design specifications	Desktop Application, Enhancements in iOS and Android Applications
Develop and define system test plan	System Test Plan and Test Cases
Perform system testing	Software Test Report

Perform Integration Testing	Software Test Report
Preparing materials to be delivered to the sponsor	A) User manual B) Desktop Application C) iOS Application D) Android Application

### 3.2 Resource Requirements

The estimate of the project is roughly about 1200 man hours, which includes conceptualization of the idea, development of the product, testing of the product and support for few days after deliverable.

#### Time Estimate:

Number of Team members : 5.  
Hours for each team member : 12hrs/week.  
Number of weeks required : 20 weeks.

#### Support Resources:

1) Macbook (development)	:	4
2) UNIX server(database and backend processing )	:	1
3) Iphone and Ipad (Test iOS application)	:	1
4) Android Phones (Test Android Application)	:	1

#### Meeting Hours and Location:

Day & Hours : Monday from 13:00 - 14:00  
Location : Conference Room in Peralta 2nd Floor, ASU Polytechnic.  
Attendees : a) Timothy Lindquist.  
b) Richard Whitehouse.  
c) Arpit Jaiswal.  
d) Gowtham Nayak.  
e) Mihir Bhatt.  
f) Senthamil Sindhu.  
g) Sweta Singhal.

**NOTE:** All meeting minutes uploaded to file exchange folder for the team on Blackboard.

## 4. CONDITIONS AND COMMENTS

This section contains two subsections that specify the terms and conditions of work by the team and the needed collaboration between the team and sponsor.

### 4.1 Assumptions and Constraints

The team develops apps on Android and iOS platform. Also a desktop application will be developed using Java Swing. To develop the project the team needs expertise in Java, Android Application development, Swift, iOS application development, familiarity with client-server architecture. The

android application can be run on any device which has API Version 19 and above. Similarly iOS application can be run on iPhones and iPads. The Java Swing application can be run on any device which runs Java JRE7 and above.

The application is developed on top of an existing application. The current application is ported to newer version of APIs and programming language and new features are added. Hence we would be requiring the documentation of the existing application.

We will be working in agile fashion delivering updates for the software. Each update can be a new functionality or can be a better way of implementing the existing functionality.

## **4.2 Limiting Conditions**

The mobile application development is limited to only 2 platforms Android and iOS. Also software which controls the content in the mobile application is limited to a Java Swing Desktop application. The responsibility of each team member is identified as below

Name	Role	Title
Arpit Jaiswal	Application developer	iOS Developer
Gowtham Nayak	Application developer	Swing Developer
Mihir Bhatt	Application Developer	Android Developer
Senthamil S B	Application Developer	Swing Developer
Sweta Singhal	Application Developer	iOS Developer

The success criteria is when the applications are published in the respective application marketplace.

### **4.2.1 Factors Associated With the Academic Nature of the Project.**

#### **4.2.1.1 General Disclaimer**

All students majoring in Software Engineering at ASU are required to complete a two semester, culminating experience project. The project proposed, ASUIHO, is expected to fulfill this requirement for the project team of HackSlash. While the intent of the team is to deliver a high quality product that meets the sponsor's expectations, neither the students, faculty adviser, or ASU can be held responsible for any errors in the delivered software product, failure to meet any of the specified requirements, or failure to deliver the software.

#### **4.2.1.2 Support Limitations**

Team HackSlash also indicates that accepting this proposal, the sponsor recognizes that upon completion of the project and delivery of the proposed system, neither the culminating experience project team nor any other representative of ASU is obligated to provide software

maintenance or additional support. ASUIHO project work cannot be extended beyond the completion date set for SER 517.

#### **4.2.1.3 Ownership of the Product**

Typically, there are no formal agreements as to the ownership of the software. ASUIHO project is an academic requirement and is not intended to be considered as work by the University or the project's sponsor in which some form of remuneration is expected. While the software and all of the supporting materials are delivered to the sponsor as a condition of completion of the project, team members share ownership with the sponsor.

### **5. APPROVALS**

#### **Decisions agreed upon:**

1. Requirement to update the app remotely from a JAVA swing desktop app.
2. IHO Logo - Need to update the app with new logo for IHO and reformat the header throughout the app.
3. Need to push the generated XML from JAVA Swing app to a server.
4. Security - Need to make sure adversary cannot tweak the XML hosted on the server.
5. Image Gallery - Need to have limit on text associated with each image.
6. Image Gallery - Need to decide on optimal image size (both portrait and landscape).
7. Field Notes – Inside New Science tab all latest publications must be visible on top of the list.
8. Field Notes – Need to decide on optimal number of items in New science.
9. Database - Need to move the database outside of the bundle.
10. Who is Lucy - Fix problems with Who is Lucy tab. Need to fix the pop-up issue and alignment with Lucy.
11. Connect - The Connect tab must have all social media handles at one place – Twitter, Facebook, Vimeo, Youtube, Instagram.
12. Becoming human - Need to add “Ask an anthropologist?” label to this tab. Also reduce the bar size.
13. Donate - Need to update the Donate link.
14. News and Events - Need to remove the interim page and directly point it to the link of news and event website of IHO.
15. News and Events – Add a feature story page, which goes to an interim page and then a IHO website link.
16. Travel and Learn – Need to remove Scroll. Add read more which points to the IHO travel page link directly.
17. One challenge posed will be the change of URLs since the IHO website is undergoing change.
18. Student Blog – Need to reformat and remove the ambiguity.
19. The final project deliverable (iOS app, Android app and Desktop application) is April 30<sup>th</sup>, 2016.



20. HO has an event on April 8<sup>th</sup>, 2016, so it would be beneficial if the project is delivered by that time.
21. Need to make an initial prototype of the JAVA Swing app before 18<sup>th</sup> January, 2017.

**SIGN OFF:**

Name	Role	Title	Sign off
<b>Timothy Lindquist</b>	Project Sponsor	Faculty Advisors	
<b>Richard Whitehouse</b>	Project Sponsor	Faculty Advisors	
<b>Julie Russ</b>	Project Sponsor	IHO Coordinator	
<b>Arpit Jaiswal</b>	Application developer	iOS Developer	
<b>Gowtham Nayak</b>	Application developer	Swing Developer	
<b>Mihir Bhatt</b>	Application Developer	Android Developer	
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