

**REQUESTED BY:** DR. DAVID BIROS  
**PREPARED:** HALI DEUBLER AND KEITH WRIGHT

**DATE:** 11/9/2014

## **SYSTEMS PLANNING AND SELECTION**

### **A. PRIORITIES FOR SYSTEM AND PROJECT**

- a. The system must allow employees to clock in remotely using the mobile application for Android. The application must list what computer tickets are still active for the convenience and feasibility of Geekabytes employees.
- b. The data supplied to the employees must be accurate and simple in nature. The application will use a front facing graphic user interface that displays information from the clock-in server located in New York City.
- c. A Geekabytes employee should be able to clock-in to the application, and view which tasks or tickets they have open to complete for the day's work. The employee will then be able to clock-out for lunch and at the end of the day.

### **B. Architecture for data, networks, hardware, and IS management**

- a. See page 6

### **C. EMPLOYEE WORK PLAN**

- a. Kyle Riedemann
  - Creation of the application
  - Development of the ERD.
- b. Aaron Wright
  - Creation of the DFD.
- c. Travis Dever
  - Creation of network architecture diagram
  - Language Support
- d. Hali Deubler
  - Geekabytes research
  - Baseline Project Overview
  - Language Support

- e. Keith Wright
  - Creation of System Scope Statement
  - Baseline Project Overview
  - Language Support

**D. SYSTEM SCOPE AND FEASIBILITY**

- a. See page 4

**SYSTEMS ANALYSIS**

**A. SYSTEM DESCRIPTION**

- a. Currently, if an offsite job is available, the employee must first drive to the repair shop in Stillwater, Oklahoma and then drive to the offsite location. This is costing Geekabytes, LLC extra expenses and costing their employees extra gas.

**B. GENERAL RECOMMENDATIONS**

- a. An entity relationship diagram is attached on page 10 The E-R diagram will store the data logged from Geekabytes, LLC.'s website as well as the application we are making in the database.
- b. The application we are making has a simple design and allows the employees to clock in remotely. This application also shows the employees what computers are at the store waiting to be worked on.
- c. When an employee clocks in, the application will talk to the database and update the information.
- d. At the store, when an employee enters notes about a computer, the database will update. After the data is entered, the application will show the current status of what needs done at the store.

**C. SYSTEM JUSTIFICATION AND ALTERNATIVE SYSTEM POSSIBILITIES**

- a. Clocking in at Geekabytes, LLC could include building a web application where the employees would use the web browser on any device to clock-in.
- b. The employees could call the secretary Arlene, and have her clock in for each employee. This system is composed of possible issues with the exception of employees that start offsite jobs before Geekabytes opens.
- c. The proposed Android application is the best solution at this time. All employees own Android phones and can download the free app.

## **SYSTEMS DESIGN**

### **A. SPECIFICATION DETAILS**

- a. Screen Design (GUI)
- b. Forms and Report Design
- c. Logical Design
- d. Conceptual Design
- e. Database Design

### **B. ACQUISITION PLAN**

- a. To use this system all employees must download the application on their Android phone from the Google Play Store.

## **SYSTEMS IMPLEMENTATION AND OPERATION**

### **A. Code**

- a. Kyle Riedemann coded the clock-in application for Geekabytes. The application will be hosted on the Google Play Store and its source code is located on Github at [https://github.com/kylealanr/IT\\_POS\\_Check\\_In](https://github.com/kylealanr/IT_POS_Check_In).

### **B. Documentation**

- a. Developer documentation will be located on Github. Information about the user facing application will be in the description on the Google Play Store once the app is uploaded.

### **C. Training procedures and support capabilities**

- a. No training is necessary for this application. The timesheet portion of the application has users update their timesheet in exactly the same manner as the desktop application used at the store.

### **D. New versions or releases of software with associated updates to documentation, training, and support**

- a. New versions will be available on the Google Play Store and update notes will be included in the store description.

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**DATE:** 11/7/2014

## **PROJECT INFORMATION**

PROJECT NAME: GEEKABYTES CHECK-IN  
PROJECT MANAGER: N/A

## **PROBLEM/OPPORTUNITY STATEMENT:**

Geekabytes LLC is currently seeing more on-site jobs now than ever before. The employees of Geekabytes need an efficient way to clock in and out while on a job instead of driving to Geekabytes to login to the timesheet website. Employees also need to view what tasks are available at Geekabytes headquarters as well as what on-site jobs are currently available.

## **PROJECT OBJECTIVES:**

To enable employees to have a convenient way to clock-in and out of Geekabytes, as well as provide them with a list of available tasks on and off-site from any location without having to drive to Stillwater, Oklahoma.

## **PROJECT DESCRIPTION:**

An Android application will be built to communicate with the existing information system that keeps track of employee timesheets as well as tasks available on and off-site for Geekabyte employees. The application will be downloaded to the employee's phone through the self-serve information system in place at Geekabytes. The application will be created by the senior technician Kyle Riedemann of Geekabytes LLC, while coordinating with the business owner Daniel Devers.

## **BUSINESS BENEFITS:**

- Employee convenience
- Efficient workflow
- Saved fuel costs
- Saved employee overtime costs

## **PROJECT DELIVERABLES:**

- Detailed Work Plan
- Feasibility Analysis
- Android Application
- Presentation regarding use of Android application
- Employee Training

**ESTIMATED PROJECT DURATION:**

14 weeks

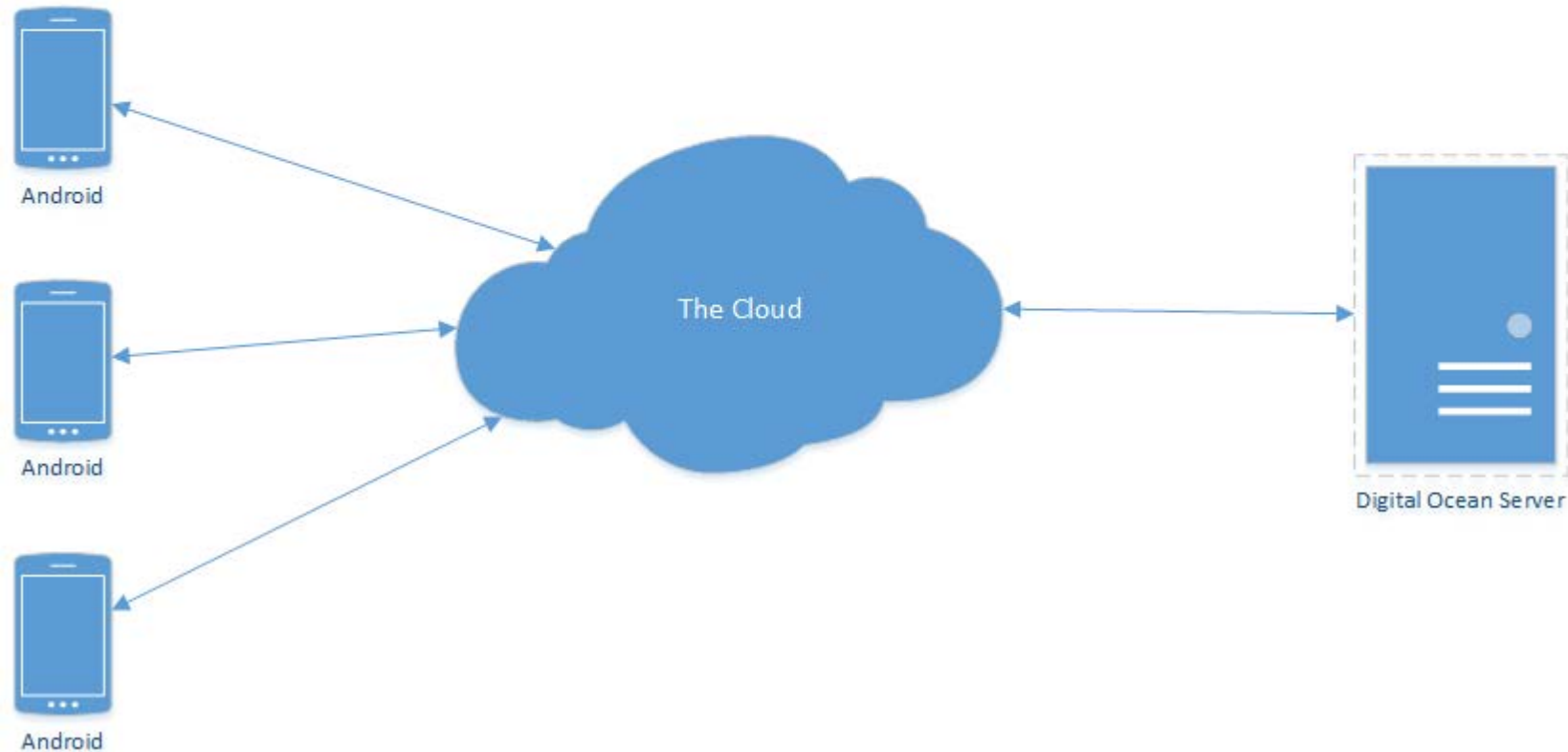
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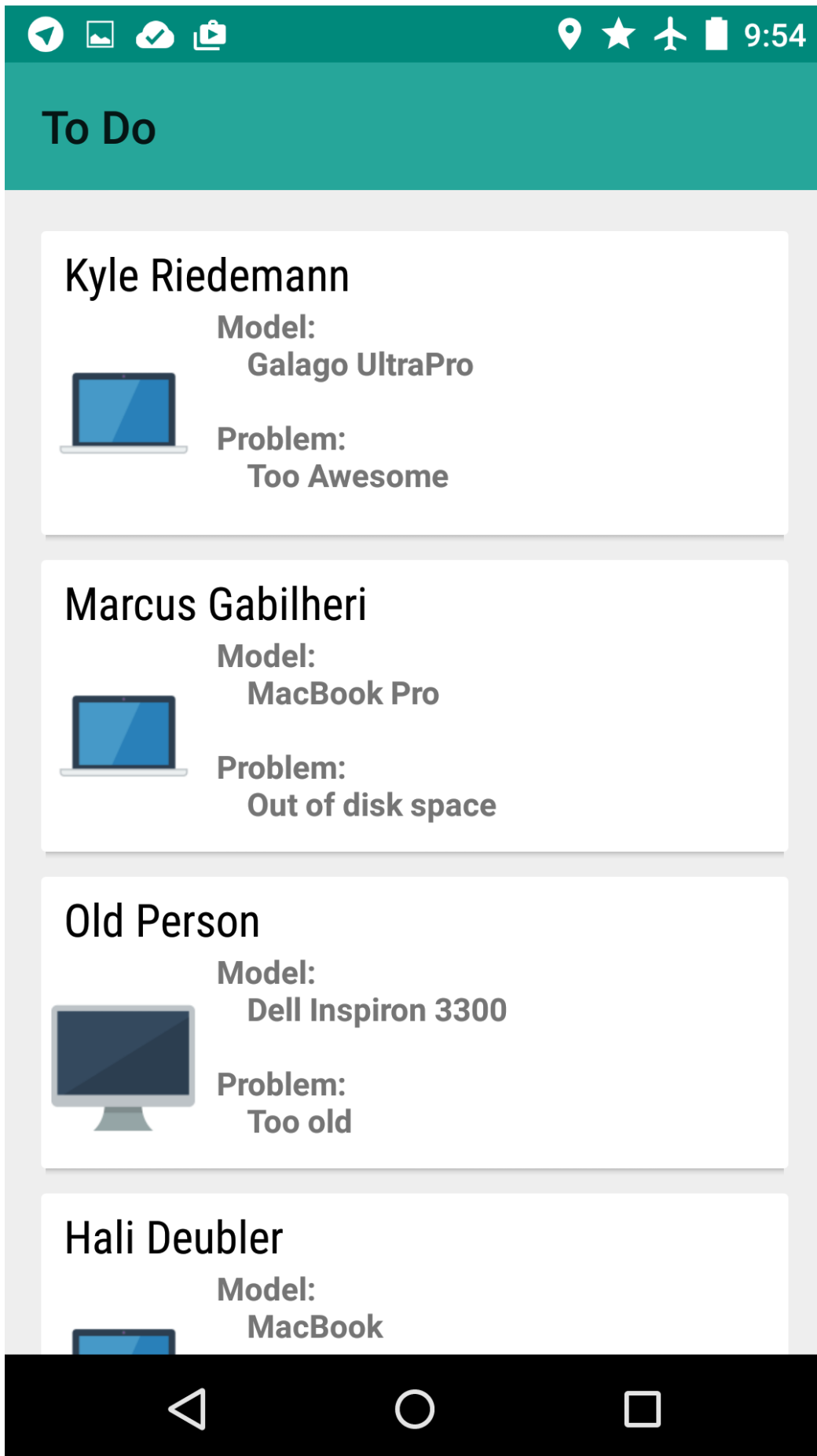
IS LIAISON: Kyle Riedemann

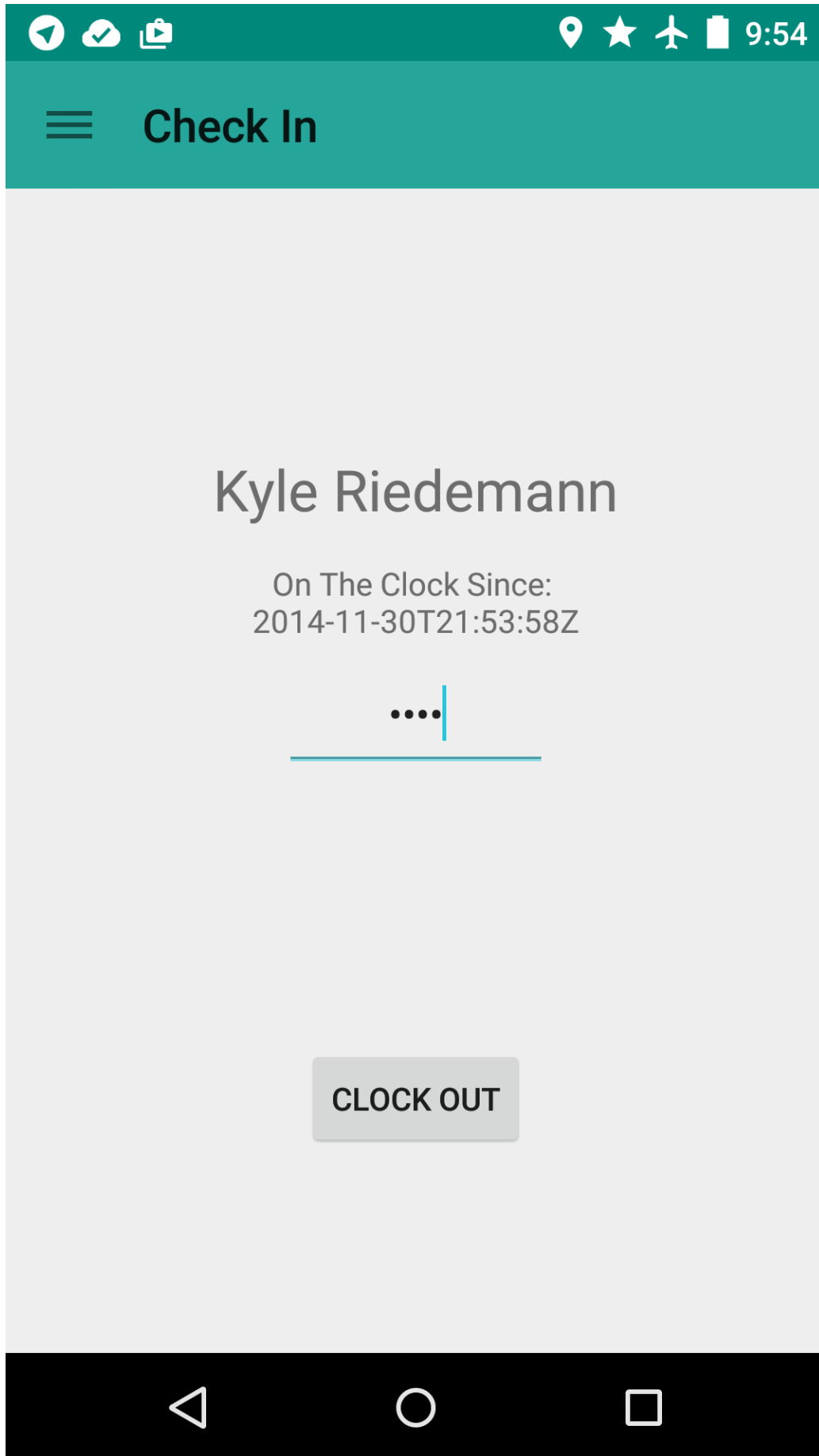
SPONSOR: Daniel Devers (Owner)

# System Architecture

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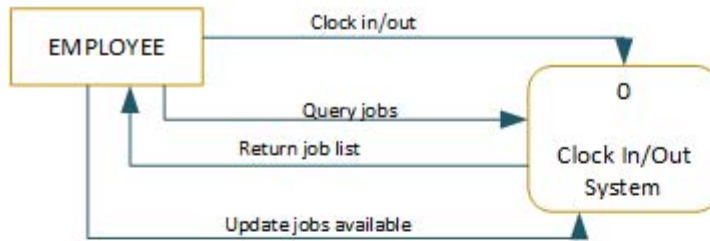








## Context DFD



## Level-0 DFD

