

Software Requirements Specification

Calpers Interactive Kiosk

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1. Introduction

This section provides the overview of the SRS document, including the purpose of the document and the scope of the project.

1.1 Purpose

The purpose of this document is to provide a detailed description of the functions and performance requirements for the “Calpers Interactive Kiosk” application. This document will explain the core requirements and functions of the system, how the system will be designed, and interfaces of the application.

1.2 Scope

The “Calpers Interactive Kiosk” is a touchscreen application which helps guests and employees find contact information from a roster of employees registered inside a database. The application will have a simple user interface which helps navigate users through an array of touchscreen functions that would help find the names, classifications, locations, photos, and contact information of employees that reside inside of the complex. Users will be able to contact employees using SMS (Short Message Service) and email if they so desire.

The roster and database will be updated by administrators provided with information from new employees as well as location data and structural changes to the complex. Administrators will be using a web-based portal (subject to change) to update, verify, and keep information accurate.

Currently our limitations to this software that we cannot implement would be the integration of outlook calendar, and a pan/zoom function (subject to change).

2. General Description

This section will provide information relating to the characteristics of the system and how it will operate and communicate with other systems and/or entities. It will also describe each class of user that will be using the system, and what privileges they will have.

2.1 Glossary

A:

Application: The application refers to the program being run on the hardware. This does not include anything the application interfaces with (refer to “System”)

Array: A list of items/objects/entities.

D:

Database: A structured set of data held in a computer, especially one that is accessible in various ways.

H:

HTTP Protocol: (Hypertext Transfer Protocol) The standard procedure for data communication over the Internet.

I:

Interface: An interaction between the system and another entity.

K:

Kiosk: A stationary devices that provides useful information to whom that information may concern.

N:

Native Application: The native application for this system refers to the environment for which it is intended to be used most, being a touchscreen kiosk. The Native Application will be intended for IOS and Android devices.

S:

Scope: A realistic vision of the system, taking into account any limitations.

System: The application for which this document is describing. The system includes everything the application interfaces with.

U:

Use Case: A situation where someone will be performing an action through the system, with the intention of being served by the system.

W:

Web Application: The version of the Native Application that will be run through an internet browser (i.e. Internet Explorer, Chrome, Firefox, Safari).

WebGL: A Javascript API used to run compatible applications through any web browser, without the need to additional software.

2.2 User Characteristics

The program will be written with three types of users in mind: Admin users, Staff users, and Guest users. Each type of user will have access to different areas of the application.

Admin users will be able to use the application to search the employee database, update the employee database, edit specific employee information, and add or remove specific employees from the database.

Staff users will be able to use the application to search the employee database. They will have access to all of employees' information. Staff users will have their own profile, containing their own information; they will be able to edit which parts of their information are visible to the public.

Guest users will also be able to use the application to search the employee database, but their access to employee information will be limited to whatever each employee has set to be visible.

2.3 Product Perspective

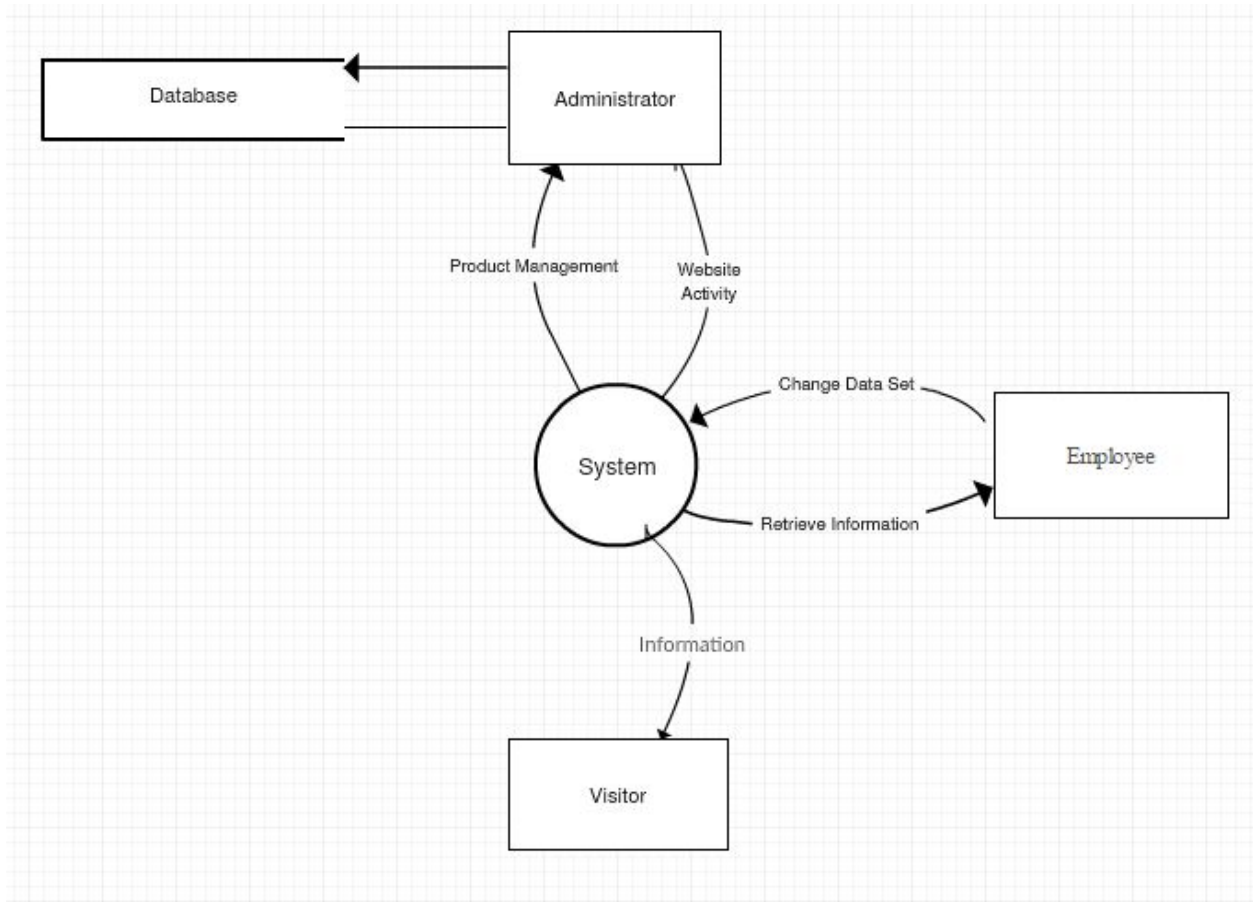
SCD Description:

The SCD shown below is a visual representation of the system. The system will be accessible through the native application on IOS and Android devices, and will also be accessible via Internet Explorer, Firefox, Safari, and Google Chrome on a WebGL based system. The native application and web based application will be identical in functionality. Both systems are going to access a database provided by the client. The system access for the application is going to be accessible through three tiers of security access: administrator, employee and guest. Each of the three tiers are going to get a specific amount of access to the system.

Administrator: The administrator will have access to the database and will have the ability to make changes to the system database. The administrator will be able to view and access all information in the system

Guest: The guest user will have the ability to view some of the individual attributes provided by the employees of the client. The guest will not have any ability to make changes to the system.

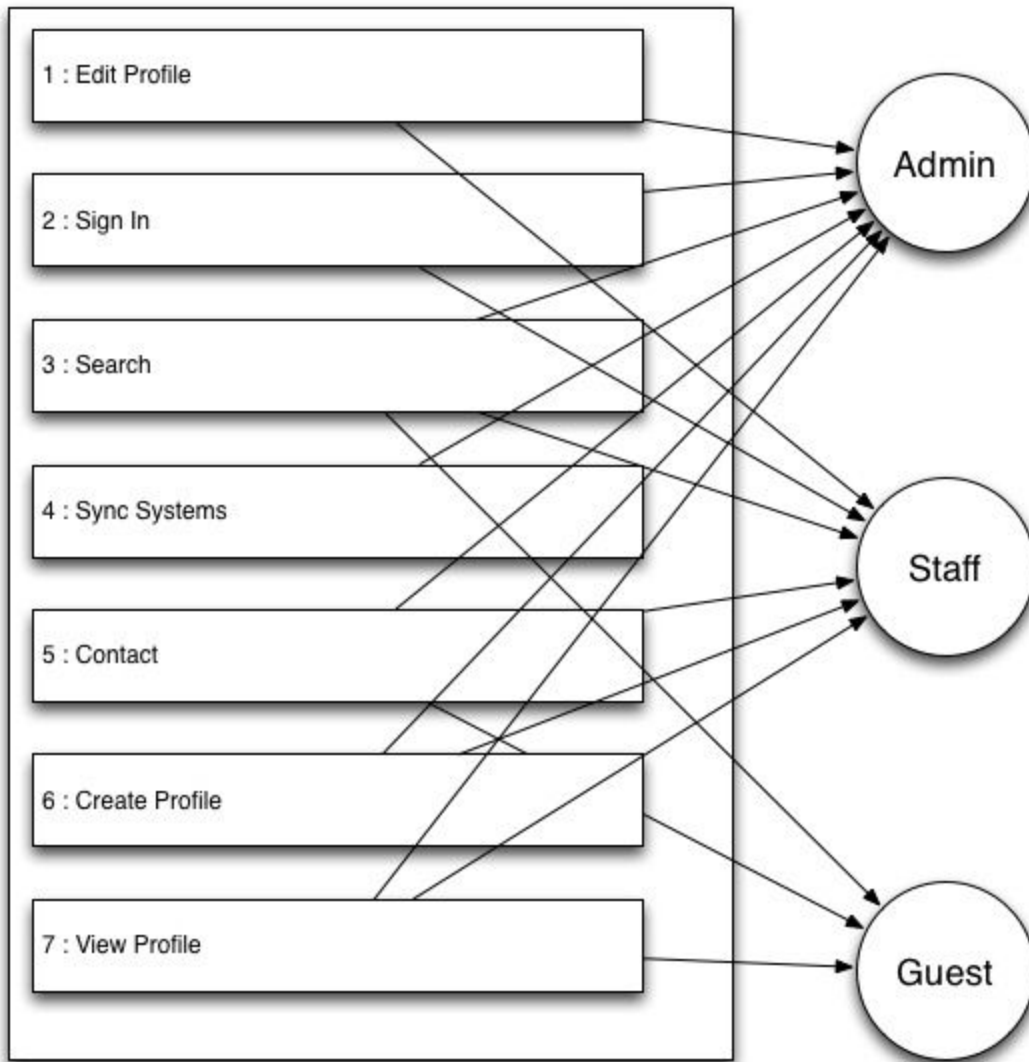
Staff: The staff user will be able to access the same information as the guest user, but will be able to edit their own information as it shows up on the system.



3. Object Oriented Analysis

This section provides a visual representation of the object oriented design of the system, and descriptions of complicated use cases.

3.1 Use Case Diagram



3.2 Use Case Descriptions

Use Case Name: Edit Profile

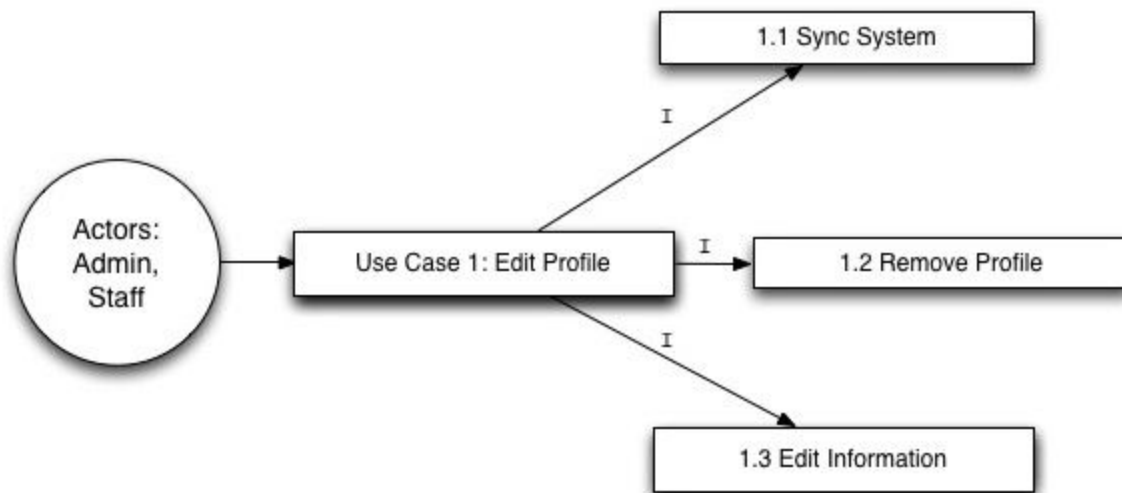
Use Case Num: 1

Authors: All Members

Actors: Staff and Admin

Overview: This use case captures the process of managing one's personal account, or managing others' accounts as an admin user.

Reference: This use case captures: FR4,FR5,FR6,F15,FR16



Related Use Cases: Related to UC4 and UC5

Typical Flow Admin:

Preconditions: System is on. Admin or Staff user is logged into their account. User is in "Profile Functions" section of application.

1 : User selects Edit Profile

2 : System redirects user to their profile information

3 : User changes desired attributes

4 : User saves changed information

Postconditions: User's profile information has now been changed, and will show up accordingly.

Alternate Flow:

Preconditions: System is on. Admin or Staff user is logged into their account. User is in "Profile Functions" section of application.

1 : User selects Edit Profile

2 : System redirects user to their profile information

3 : User changes desired attributes

4 : User leaves page

Postconditions: User has not saved inputted data, information will remain as it was before edit.

Use Case Name: Search

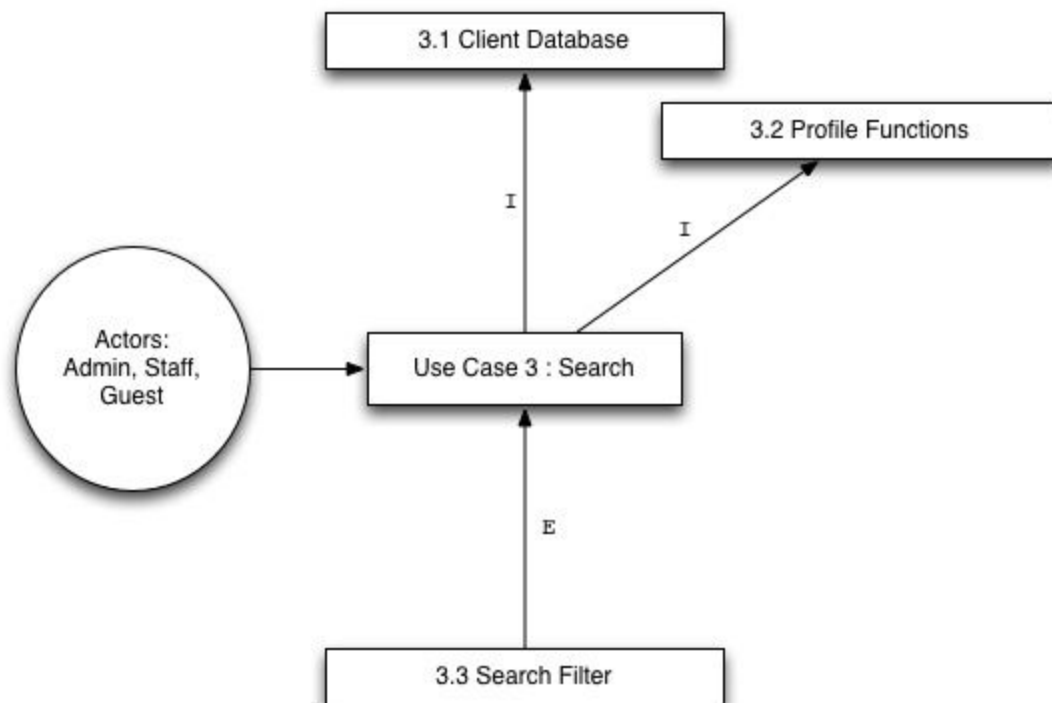
Use Case Num: 3

Authors: All members

Actors: Staff, Guest and Admin

Overview: This use case captures the process of searching for employees or resources within the Calpers database.

References: This use case captures: FR11, FR12, FR13, FR14



Related Use Cases: Related to UC1

Typical Flow:

Preconditions: System is on. System contains client's database information. User is logged in. User is using search engine.

1 : User inputs desired search information

2 : System finds relevant data corresponding to user input

Postconditions: System displays relevant information.

Alternate Flow:

Preconditions: System is on. System contains client's database information. User is logged in. User is using search engine.

1 : User inputs desired search information

2 : System does not find relevant data corresponding to user input

Postconditions: System notifies user that no data was found. User must re-enter search information.

Use Case Name: Sync Systems

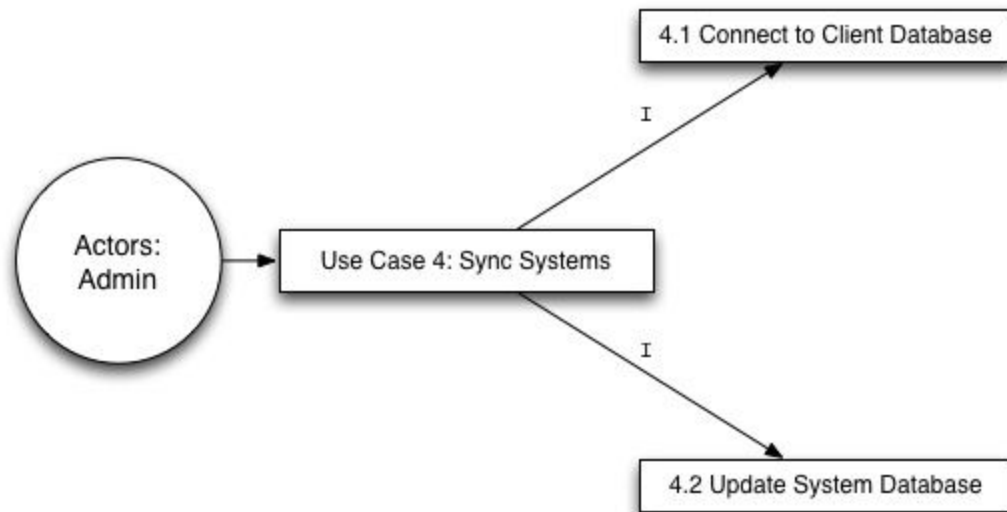
Use Case Num: 4

Authors: All members

Actors: Admin

Overview: This use case captures the process of syncing the system's database with the client's database.

References: This use case captures: FR11, FR12, FR13, FR14



Related Use Case: UC1 and UC6

Typical Flow:

Preconditions: System is on. Clients database is on. System is connected to the client's database. System is either connected to the internet or via physical contact with the clients database.

1 : Admin input command to check if system and client database matches.

2 : If databases match. System does not update.

Postconditions: System database does not change.

Alternate Flow:

Preconditions: System is on. Clients database is on. System is connected to the client's database. System is either connected to the internet or via physical contact with the clients database.

1 : Admin input command to check if system and client database matches.

2 : If databases does not match. System checks client database.

3 : System retrieves the data that does not match.

Postconditions: System is updated with retrieve data.

4. System Functional Requirements

- FR1:** User Login
- FR2:** Admin Login
- FR3:** Staff Login
- FR4:** Profile Edit View
- FR5:** Create Profile
- FR6:** Delete Profile
- FR7:** Sync Database - Administrator
- FR8:** Retrieve Password
- FR9:** Save Password (Web Application)
- FR10:** Fetch Data from Client's Database
- FR11:** Search Filter
 - 1. Name (First Name, Last Name)
 - 2. Job Title
 - 3. Building
 - 4. Floor
 - 5. Email Address
 - 6. Division
 - 7. Unit
 - 8. Manager
- FR12:** Search Employee - Administrator
- FR13:** Search Employee - Staff/Guest
- FR14:** Search Resource
- FR15:** Remove Employee - Administrator
- FR16:** Edit Employee Profile - Administrator
- FR17:** Database Contains Individual Attributes (* attributes available to Staff users)
 - 1. First Name
 - 2. M.I
 - 3. Last Name
 - 4. Photo *
 - 5. Employee Classification
 - 6. Job Title
 - 7. Desk Phone
 - 8. Mobile Phone *
 - 9. Grid Location *
 - 10. Building *
 - 11. Floor *
 - 12. Email Address *
 - 13. Access Door *
 - 14. Division
 - 15. Unit
 - 16. Manager

FR18: Database Containing Resource Attributes

1. Grid Location
2. Access Door
3. Location Name

FR19: Display Database Employee Attributes

FR20: Expand Employee Attributes on Click

FR21: Display Database Resource Attributes

FR22: Sync Kiosks

FR23: Contact Employee via SMS

FR24: Send Contact Information to User via Email

FR25: Send Contact Information to User via SMS

FR26: Kiosk Touchscreen Interface

FR27: Application View - Portrait Format

FR28: Application View - Landscape Format

5. General Constraints and Assumptions

This section will layout all of the hardware limitations and requirements, as well as assumptions being made about the system.

5.1 Hardware Requirements

The system needs to be able to sync up with the client's database, therefore the hardware must be able to connect to the internet. The web-based version of the system will be built to be run through Internet Explorer, Google Chrome, Safari, and Firefox, regardless of operating system. It will also be designed to run on IOS and Android devices as well, and will include touchscreen support.

System Requirements:

- ☐ Desktop
 - ☐ OS: Windows XP SP2+, Mac OS X 10.8+, Ubuntu 12.04+, SteamOS+
 - ☐ Graphics card: DX9 (shader model 2.0) capabilities; generally everything made since 2004 should work.
 - ☐ CPU: SSE2 instruction set support.
 - ☐ Web Player (deprecated): Requires a browser that supports plugins, like IE, Safari and some versions of Firefox
- ☐ iOS: requires iOS 6.0 or later.
- ☐ Android: OS 2.3.1 or later; ARMv7 (Cortex) CPU with NEON support or Atom CPU; OpenGL ES 2.0 or later.
- ☐ WebGL: Any recent desktop version of Firefox, Chrome Edge or Safari
- ☐ Windows Phone: 8.1 or later
- ☐ Windows Store Apps: 8.1 or later

6. User View of Product Use

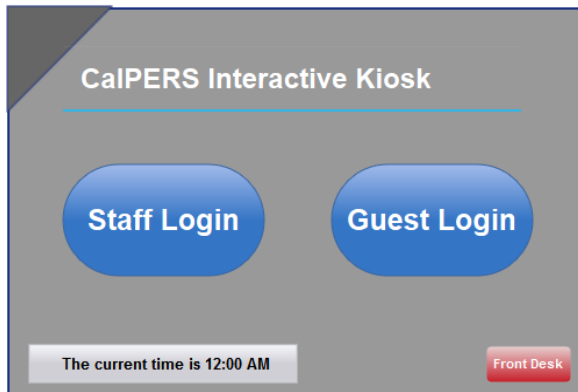


Figure 1



Figure 2 (Guest)



Figure 3

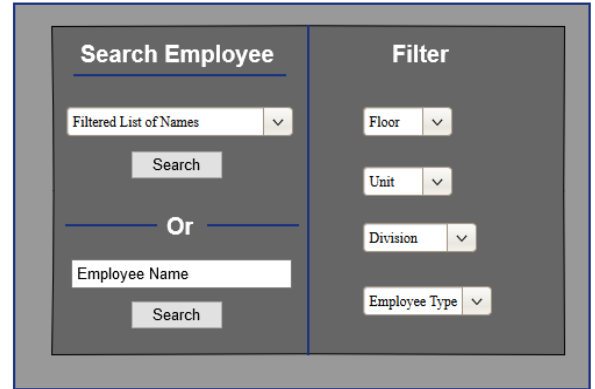


Figure 4

Figure 1 is the main screen of the kiosk in which the user will see, there will be two options either a staff or guest login. Kiosk will display the current time for the user to see and a help button that will direct them to the front desk for any further questions that they would need.

Figure 2 is the interactive map section for the guest where the user has options to browse whether the employee they need to search for is in their current floor or other floors listed in the kiosk. Searching for employee will also change the floor to where they are currently at and help direct the user to the nearest access door or the office that they are in. Grid location will be dependant on the database. Current location will help display where the user is currently at on the map with the kiosk.

Figure 3 is the Profile creator for staff, in which they input their information that will be displayed. Each box is mandatory to help with the search function of the application, photo is optional to help users recognize employees.

Figure 4 is the search function for the user, if they know specific information about the employee but forgot the name, they could filter a list to help narrow their search with a list of employees at the current floor, unit, division, but also they can filter out the different types (i.e Manager, etc). If they do know the employee name but not any other attributes they can just input the employee name and press/hit search to find the specific employee.

All inputs will be made by an onscreen touch keyboard for the kiosk. Other devices will be used with an onscreen touch keyboard as well with the exception of laptop and personal computer where mouse and keyboard is used. All interfaces will be re-adjusted and fit on-to screen depending on the device being used. While some implementations might not work on other devices beside the kiosk (i.e current location), the button would be greyed out.

7. Specific Requirements

This section provides a general overview of the Interface requirements for users, hardware, and system communication.

7.1 Interface Requirements

7.1.1 User Interfaces

The user interface for the software will be compatible to any web browser through WebGL. Users will also be able to access the system as an iPhone or Android application if they wish.

7.1.2 Hardware Interfaces

The hardware interface is going to be laptop, desktop and tablets that has the capability to support Unity base application.

7.1.3 Communications Interfaces

The system shall use the HTTP protocol for communication over the internet for gaining access to the clients database. We will also be using the HTTP protocol for guest and employee access of the application via the internet. For the communication with other employees we are going to use SMS, which is supported by protocols: HTTP, HTTPS, XML, SMTP, and FTP.

8. Detailed Description of Functional Requirements

This section provides a detailed description of each requirement in the system.

8.1 Functional Requirement Descriptions

FR1: Guest Login

Purpose:

Guest login will be how a non-registered user will be able to interact the system with Guest tier access. This does not require any form of identification, and gives the user immediate access to the application.

Inputs:

User will touch the “Guest” login option.

Processing:

The system will direct the guest user to the system with guest permissions.

Output:

The guest user now has guest access to the system.

FR2: Admin Login

Purpose:

Admin Login will be how the Administrator of the application will be able to interact the system with administrator tier access. This will require the Administrator user to provide login information.

Inputs:

Data input will be received by keyboard.

Email (String) : unique string used to identify Administrator’s profile.

Password (String) : unique string used to validate login to gain access to Administrator’s profile.

Processing:

Checks inputted Username and Password with archived Admins’ Usernames and Passwords, creating two possible situations:

Login Information Correct:

User has entered Admin login information correctly, and will be given access to application with Administrator tier access.

Output:

Admin now has access to the system with admin tier access.

Login Information Incorrect - No Existing Username:

User has not entered login information correctly, and will remain in the login page to try again.

Output:

String with “No existing user with that username” message will be displayed in red text. Demands that the admin re-enter login information.

Login Information Incorrect - Username/Password do not match:

User has not entered login information correctly, and will remain in the login page to try again. User will be given the option to Retrieve Password.

Output:

String with “Username and Password do not match” message will be displayed in red text.

Link that will redirect to retrieve password will be displayed.

FR3: Staff Login

Purpose:

Staff Login will be how the employee users of the application will be able to interact the system with Staff tier access. This will require the staff user to provide login information.

Inputs:

Data input will be received by keyboard.

Email (String) : unique string used to identify employee’s profile.

Password (String) : unique string used to validate login to gain access to employee’s profile.

Processing:

Checks inputted Email and Password with archived employee’s Emails and Passwords, creating two possible situations:

Login Information Correct:

User has entered Staff login information correctly, and will be given access to application with Staff tier access.

Output:

Staff user now has access to the system with staff tier access.

Login Information Incorrect - No Existing User:

User has not entered login information correctly, and will remain in the login page to try again.

Output:

String with “No existing user with that email address” message will be displayed in red text. Demands that the staff user re-enter login information.

Login Information Incorrect - Email/Password do not match:

User has not entered login information correctly, and will remain in the login page to try again. User will be given the option to Retrieve Password.

Output:

String with “Email and Password do not match” message will be displayed in red text.

Link that will redirect to retrieve password will be displayed.

FR4: Profile Edit View

Purpose:

Profile Edit View is a tool that allows the administrator to make changes on some staff attributes (attributes will be edited in an identical format). The staff will also be able to make changes but only to specific attributes such as Photo, Email and Mobile Phone. The Profile Edit View will also allow staff to have the option to remove certain attributes from being viewed by guest and staff.

Inputs:

The input is going to be mouse, keyboard and touchscreen. The mouse and touchscreen is going to allow the staff to select the specific attributes they want to change. The keyboard is going to allow staff to make specific changes to data stored in an attribute.

Processing:

The process of changing specific attributes will require the user to input correct data type and format. If the user inputs incorrect data and format for specific attribute the system will not allow the input of that data to the specific attribute.

Output:

The system will provide a warning if such occurrence happens. If the user inputs correct data and format it will allow the changes to occur.

FR5: Create Profile

Purpose:

Create Profile will let the staff enter any information that they can allow to be seen by either other staff users or guest user. Information provided by the staff user can be modified by the Administrator of that section/department. Profile will be a generic template for everyone that will not hold private information. (Subject to change; or be modified)

Inputs:

Information inputted about where their office is located, their email or phone number, operation times and their status (away, lunch, vacation, etc).

Office (Integer, String, Integer): Will include the floor, section/department number

Email (String): After entering and saving the profile, a validation will be required for said email provided by the user for it to be accepted.

Phone Number (Char Array): 10-digit numbers only. (Not accounting for extensions; subject to change)

Business Photo: (size to be determined)

List of different Status updates.

Processing:

Everything will be saved onto a database to hold all information. (Subject to change)

Email Address Information:

Checks the validation of the email. This helps to ensure when guests/staff are unable to reach said person that their information is correct so that they can contact via email.

Output:

String with "Confirmation has been sent to provided email". Timer for confirmation to be 24-48 hours else they will be alerted to change their email.

Business Photo upload:

Size is yet to be determined for the photo that will be uploaded. Type will also be determined at a later time period.

Output:

Photo will be displayed on the created profile of said width and height.

Output:

After profile creation, status will be updated whenever the user changes their notice this will determine and show whether they are away, at lunch, off work, etc.

FR6: Delete Profile**Purpose:**

Purpose is the deletion of a profile stored in the database.

Inputs:

The input will be a mouse. The mouse will either determine the boolean flag to be true or false for the deletion of the profile.

Processing:

String with “Confirm profile deletion, [Yes] and [No] as the buttons interface which will set the flag to be true or false.

If flag is set to true then the profile will be deleted from the database.

Output:

String with “Profile has been deleted” or “Profile has not been deleted”.

FR7: Sync Database - Administrator**Purpose:**

If updates have been made to the database, the admin will need to sync the system’s database with the client’s.

Inputs:

The admin will select the “Sync Database” option from his list of admin functions.

Processing:

Our system will connect to the client’s database, updating the system’s database to match the client’s current database.

Output:

The system’s database will now contain all of the updated information.

FR8: Retrieve Password**Purpose:**

The purpose is to allow staff and administrator to retrieve password.

Inputs:

The input is going to be an email address that the user provided during the creation of their profile.

Processing:

The system will check if the email provided matches any of the emails that was provided during the creation of staff profiles.

Output:

The system will provide a warning if the given email doesn't match provided during the creation of staff profiles. If email address does match a specific email address the system will send the password to that specific email address.

FR9: Save Password (Web Application)

Purpose:

Save Password application allows the user to save passwords when accessing the system through a web portal. It allows for faster access to the system without the hassle of entering username and password.

Inputs:

The input provided by the user is to click on the user login and input the first letter of their username.

Processing:

Once the user clicks and input the first letter of their username, the username and password should automatically fill out. If the first letter input doesn't match the stored username then username and password does not automatically filled out.

Output:

The output will be a pop-up that tells the user whether they want to save the password or not.

FR10: Fetch Data from Client's Database

Purpose:

The purpose is to allow an administrator to retrieve data from the client database.

Inputs:

The input for this process is going to be the language mysql and php.

Processing:

Once the database is connected to the clients database the data that client provided will be copied and stored.

Output:

The output will be a confirmation whether the database was copied or not.

FR11: Search Filter

Purpose:

The search filter will allow the user to search by different employee attributes.

Inputs:

The user will be able to access the filter by clicking/touching the "search filter" option. If accessed, the user will have the option to search for employees based on the following attributes.

1. Name (First Name, Last Name)
2. Job Title
3. Building
4. Floor
5. Email Address
6. Division
7. Unit

8. Manager

Information submitted to the search engine will then be compared to the attributes selected.

Processing:

Depending on the attribute selected, the system will use the inputted data and compare it with all employees that share this information.

Output:

The system will create a list of employees that share the inputted information.

FR12: Search Employee - Administrator

Purpose:

Administrator users will be able to search for employees in the Calper's employee database.

Administrators will have the added functionality to Remove Employee and Edit Employee Profile.

Inputs:

Administrator will search for employees by inputting employee information into the search engine.

Processing:

The search engine will generate a list of employees based on the admin's input.

Output:

The list of relevant employees will then be displayed to the screen with admin privileges.

FR13: Search Employee - Staff/Guest

Purpose:

Staff and Guest users will be able to search for employees in the Calper's employee database.

"Search Filter" can be used to edit search engine properties.

The search engine will display employees actively as input is entered.

Inputs:

Inputs will be provided via keyboard for searching, and mouse/touch for expanding the "Search Filter."

Processing:

The search engine will generate a list of employees based on the user's input.

Output:

The list of relevant employees will then be displayed to the screen.

FR14: Search Resources

Purpose:

Like employees, users will be able to search for building resources (i.e. conference rooms, restrooms, etc.).

Inputs:

User will select the "Resource" option in the employee search engine.

Processing:

The search engine will now generate a list of resources based on the user's input.

Output:

The list of resources will be displayed to the screen.

FR15: Remove Employee - Administrator**Purpose:**

This will allow the Administrator to remove an employee from the application's database.

Inputs:

Keyboard will be used to input Admin password for verification.

Processing:

Checks inputted password with current Admin's password.

Situation - Passwords Match:

The Admin has been verified, remove employee from database.

Output:

Sends command to remove this employee object from the database.

FR16: Edit Employee Profile - Administrator**Purpose:**

Overwriting information made by the staff in case they have forgotten their username/password. Also to help recover or delete profile made by staff members.

Inputs:

Keyboard will be used to input Admin username and password. Phone touch-screen will be used to input Admin username and password. Mouse/Phone will be used to overwrite profiles in the database.

Processing:

Verifies that the user(admin) has permission to overwrite profile attributes. Will need to input username and password again to delete profile.

Output:

Changed attributes for profile, deletion of profile in the database, username/password recovery for staff member sent by email.

FR17: Database Contains Individual Attributes (* attributes available to Staff users)**Purpose:**

Employee entities will need to contain the attributes listed below.

1. First Name
2. M.I
3. Last Name
4. Photo *
5. Employee Classification
6. Job Title
7. Desk Phone
8. Mobile Phone *
9. Grid Location *
10. Building *
11. Floor *

12. Email Address *
13. Access Door *
14. Division
15. Unit
16. Manager

FR18: Database Containing Resource Attributes

Purpose:

Resources entities will need to contain the attributes listed below.

1. Grid Location
2. Access Door
3. Location Name

FR19: Display Database Employee Attributes

Purpose:

To be able to quickly assess and process employee attributes.

Inputs:

The input is going to be a mouse, keyboard and touchscreen.

Processing:

The process is going to be to find the desired employee. Then click on the employee profile.

Output:

The output is going to be the employee attributes divide in columns and rows. In which each attribute is going to be under a specific label.

FR20: Expand Employee Attributes on Click

Purpose:

To be able to quickly assess the attributes an employee has.

Inputs:

The input is going to be mouse or touchscreen.

Processing:

The process is going to be to click on the expand button on the employee profile.

Output:

The output is going to give an expanded view of the employee profile. Is going to contain the attributes that was not present in the main profile.

FR21: Display Database Resource Attributes

Purpose:

Make a list of available resources throughout the building.

Inputs:

The user will be able to access this information by searching for a specific resource, or by selecting “Resources” on the search engine to make a complete list of available resources.

Processing:

The system will generate a list of available resources in the building.

Output:

The list of available resources will be displayed.

FR22: Sync Kiosks

Purpose:

The purpose is to allow to update the application.

Inputs:

The devices must be connected to the internet or is physically in contact to a device in which the administrator could makes changes to the application.

Processing:

If in the process of the application being sync and error occurs. The system will provide a warning to the administrator. If the sync occur successfully it will give the administrator an indication that the sync was successful.

Output:

Confirmation whether the sync was successful or not.

FR23: Contact Employee via SMS

Purpose:

The purpose is to allow staff and guest to contact specific staff via SMS.

Inputs:

The user will click on the sms icon then choose the specific staff the he or she want to contact with. Then the user will type in a message and click send.

Processing:

If the message was not able to sent. Then the system will provide a warning that the message you sent was not be able to be forwarded to the desired staff. If the message is send successfully, the system will provide a visual sign.

Output:

The output will be whether the message was sent successfully or not.

FR24: Send Contact Information to User via Email

Purpose:

Delivers the contact information to the user when entering their email. Contact information to use at a later time if employee is currently away from their office.

Inputs:

Inputs will be read from the touchscreen kiosk for the user's email.

Processing:

Kiosk will process the input and verify that the email is working then deliver the information.

Output:

Information will contain the contact name, office/section, email, phone number.

FR25: Send Contact Information to User via SMS

Purpose:

Delivers the contact information to the user when entering their phone number. Contact information to use at a later time if employee is currently away from their office.

Assumes the person has unlimited text data.

Inputs:

Inputs will be read from the touchscreen kiosk for the user's SMS.

Processing:

Kiosk will process the input and verify that the SMS is working then deliver the information.

Output:

Information will contain the contact name, office/section, email, phone number.

FR26: Kiosk Touchscreen Interface**Purpose:**

The system will be built to support a touchscreen interface, for an intuitive user experience.

Inputs:

Inputs will be provided by the user's touch. supported gestures are as follows:

Touch Select: The user will be able to traverse the application's multiple options by tapping on them.

Touch Scroll: The user will be able to scroll through the database by dragging their finger up and down along the employee list.

Touch Keyboard: The user will be able to provide character input to the system using a touchscreen keyboard built into the application.

Processing:

The system will not accept inappropriate gestures (trying to scroll where that is not a viable option).

Output:

The system will react to the user's touch in an intuitive, appropriate manner.

FR27: Application View - Portrait Format**Purpose:**

Portrait format will be supported, with the intention of being used as a touchscreen kiosk.

Inputs:

The input is going to be the option to change the brightness of the display.

Processing:

The user is going to click on the display option and choose the degree of brightness of the screen.

Output:

The output is going to be the display with the desired brightness from the user.

FR28: Application View - Landscape Format**Purpose:**

Landscape format will be supported, with the intention of being used as a touchscreen kiosk.

Inputs:

The input is going to be the option to change the brightness of the display.

Processing:

The user is going to click on the display option and choose the degree of brightness of the screen.

Output:

The output is going to be the display with the desired brightness from the user.

8.2 Data Dictionary

Data Item Number	Data Item	Alias	Data Type	Description	Range	Default Value
1	First Name	FIN	String	Employee First Name		null
2	M.I	MI	String	Employee Middle Initial		null
3	Last Name	LAN	String	Employee Last Name		null
4	Photo	PH	JPEG	Employee Photo		null
5	Employee Classification	EMC	String	Classification of the Employee		null
6	Job Title	JOT	String	Employee Job Title		null
7	Desk Phone	DEP	Int	Employee Desk Phone Number		null
8	Mobile Phone	MOP	Int	Employee Mobile Phone Number		null
9	Grid Location	GRL	String	Location of object on the map grid		null
10	Building	BLD	String	Building object is located in		null
11	Floor	FLR	Int	Floor object is located on	1-5	null
12	Email Address	EAD	String	E-Mail address used by Employee		null
13	Access Door	ACD	String	Nearest Access door to get to Employee location		null
14	Division	DIV	String	Division name		null

				Employee belongs to		
15	Unit	UNT	String	Unit name employee belongs to		null
16	Manager	MNG	Employee	Manager of Employee		null

9. Non-Functional Requirements

Some issues to address for this application is usability, reliability, performance, security, design constraints, and Supportability/Modifiability.

The usability of this application will be a simple menu that requires either a guest or staff login. Dependant on the user's initial setup there will be a simple-to-use interface in which the user will be able to navigate around the application with ease. There will be a menu with options of what the user can access in the kiosk, an interactive map that will show where the user is currently located and other essential tools to help efficiently guide the user to their destination.

Reliability will be in the background of the application, This means the app will run with great efficiency, and will not crash all the time. This has to do with the coding behind the scenes and having reliable code to have worst-case situations taken care of by catching it early from the test/debugging phase. As hardware is not of an issue towards performance specified by the client, The code of the application will play the important role of making sure that everything will be running "smooth" with no limitation as to what can be accomplished within the specified scope.

Security is being implemented with standard encryption protocols to protect the data that is stored in our database. This application is also going to be handled by using passwords and limited access depending on the permission of the user, with the administrator power being the highest tier and guest having the lowest with very basic access of searching for an employee and viewing only things the staff has set up. Verifying staff members is also an important part of security with email verifications when setting up profiles and giving administrators permission to change what they see fit.

Portability is based on the hardware of the user, but will be able to run on mostly any internet browser via personal computer or laptops, tablets and smartphones, where the application will fit to any resolution being easily navigated and readable no matter the size.

Design constraints will be of time, as our team is very limited to only this semester to finish as much as we can with what we have. It will also factor in our experience and capability as developers to first start on the core and expand given sufficient time to do so.

Supportability and Modifiability will be handled by giving the source code to our client's IT department for maintenance.

10. Special Remarks or Comments

11. References or Resources Used

Sample SRS Document:

http://www.cse.chalmers.se/~feldt/courses/reqeng/examples/srs_example_2010_group2.pdf

Google Docs and Google Drive

Glossary Definitions:

www.dictionary.com/browse/google

Pencil Project (Interface sketch):

<http://pencil.evolus.vn/>

12. Team member's Roles and Approval

Section 1 : Tommy, Omar

Section 2 : Gadfrey, Tommy

Section 3: Gadfrey, Tommy

Section 4: Tommy

Section 5: Omar, Tommy

Section 6: Dennis

Section 7: Tommy, Gadfrey

Section 8: Dennis, Gadfrey, Tommy

Section 9: Dennis, Gadfrey

Section 10:

Section 11: Gadfrey

Tommy Kardach

Gadfrey Balacy

Dennis Liu

Omar Betancourt
