

March 18, 2018

# SHARED HOUSING MANAGEMENT

## 1. TEAM INFO

The team meets at Fertitta Hall (JFF) on Friday 3:30PM – 5:30PM

### A. Members

- Jacob Schaider | [jschaide@usc.edu](mailto:jschaide@usc.edu)
- Jae Woong Jung | [jaewoonj@usc.edu](mailto:jaewoonj@usc.edu)
- Jiayue He | [hejiayue@usc.edu](mailto:hejiayue@usc.edu)
- Joseph Son | [sonjs@usc.edu](mailto:sonjs@usc.edu)
- Kartik Mathur | [kmathur@usc.edu](mailto:kmathur@usc.edu)

## 2. DETAILED DESIGN DOCUMENT

### Hardware Requirements:

- Memory 512 MB (recommended 1 GB or more)
- Free disk space 300 MB (recommended 1 GB or more)
- Processor Speed 800 MHz (recommended 1.5 GHz or faster)

### Software Requirements

- Java version 1.4.0 (recommended 5.0 or greater)
- Eclipse Oxygen
- Tomcat

**Back-End:**

Name	User
Members	<ul style="list-style-type: none"><li>- String fname;</li><li>- String lname;</li><li>- String username;</li><li>- String email;</li><li>- String password;</li><li>- String groupId</li><li>- Vector&lt;User&gt; roommates;</li></ul>
Methods	<ul style="list-style-type: none"><li>-User(String fname, String lname, String email)</li><li>-String getFname();</li><li>-String getLname();</li><li>-String getUsername();</li><li>-String setEmail();</li><li>String setFname();</li><li>-String setLname();</li><li>-String setUsername();</li><li>-String setEmail();</li><li>-String getGroupId();</li></ul>

Name	Group
Members	<ul style="list-style-type: none"><li>-Vector&lt;User&gt; userIncluded;</li></ul>
Methods	<ul style="list-style-type: none"><li>-Vector&lt;User&gt; getAllUser();</li><li>-void addUser(User);</li><li>-void deleteUser(User);</li></ul>

Name	Allgroups
Members	<ul style="list-style-type: none"><li>-Map&lt;String,Group&gt; allGroups;</li></ul>
Methods	<ul style="list-style-type: none"><li>-void getGroups(String groupId)</li><li>-void addGroup(String groupId)</li><li>-void deleteGroup(String groupId)</li></ul>

Name	Event
	<b>Using Google API Calendar for Event Class</b> -Summary; -Location; -Description -EventAttendee[]

Name	Calendar
Members	-List<Events> allGroupEvents -Map<String,Vector<Events>> allPersonalEvents
Methods	- void addPersonalEvent(Event); -void deletePersonalEvent(Event); -void addGroupEvent(Event); -void deleteGroupEvent(Event);

Name	Command
Members	-enum CommandType; -Object object;
Methods	-Object getObject(); -CommandType getCommandType();

Name	CalendarClient
Members	ObjectOutputStream oos; ObjectInputStream ois;
Methods	-CalendarClient(String hostname, int port); -void run();

Name	CalendarServerThread extends Threads
Members	ObjectOutputStream oos; ObjectInputStream ois; CalendarServer cs;
Methods	-void sendCommand(Command command); -void readCommand();

Name	Calendar Server
Members	-Vector<ServerThread> serverThreads; -DatabaseManager dm; -ServerSocket ss;
Method	-void processCommand(Command comamnd); -void broadCastCommand(Command command);

### Front-End

These Servlets will help us to send messages/information from front-end to back-end

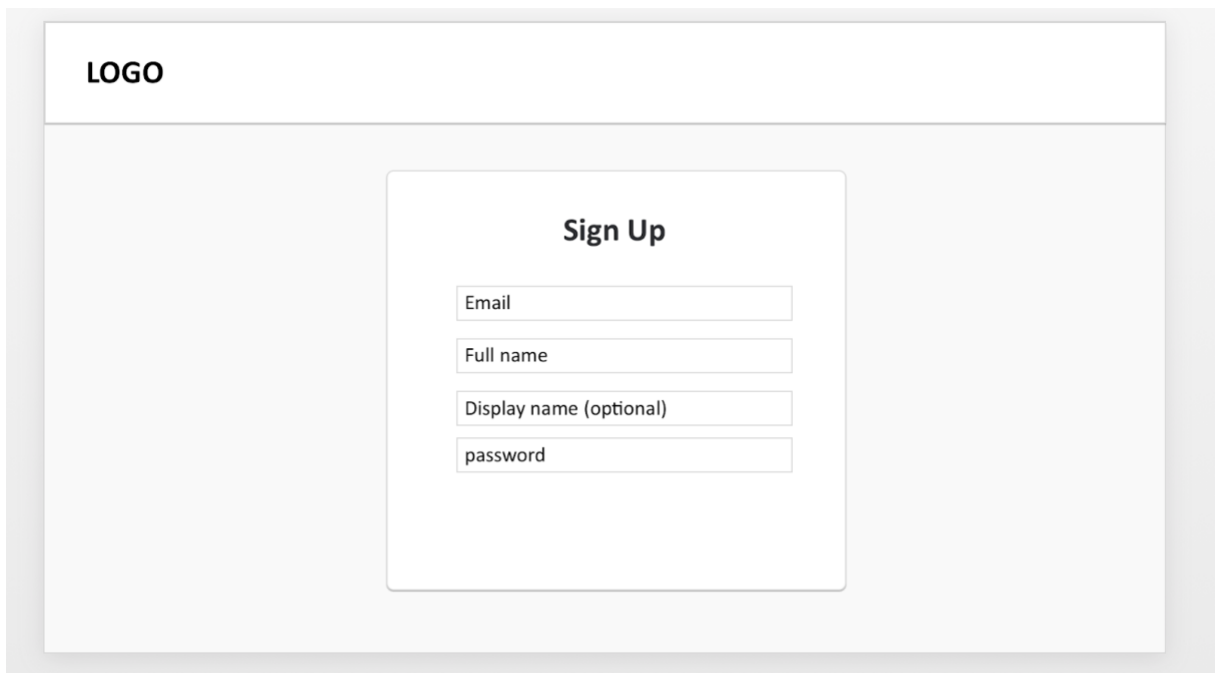
Name	SignUp/Registration Servlet
Method	boolean checkUserName(); boolean checkPassword(); Boolean checkEmail();

Name	AddInGroup Servlet
Method	boolean groupExist(); void addGroup(String groupId);

Name	AddEvents Servlet
Method	boolean timeConflict();

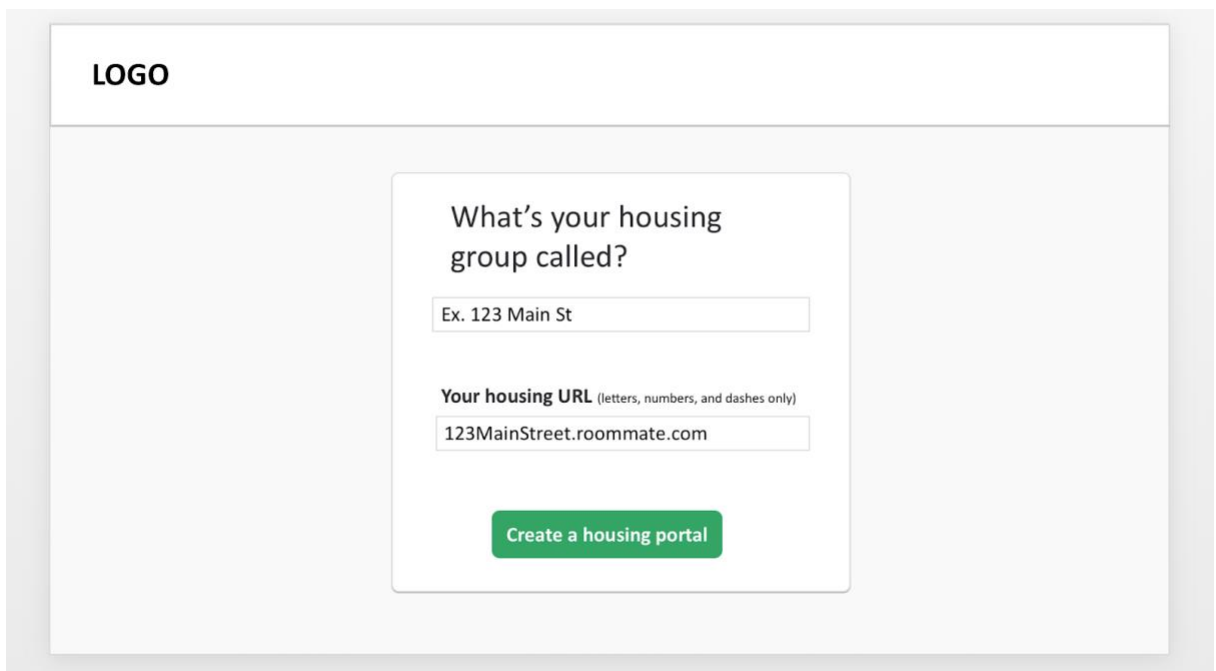
Name	StatusToggleServlet
Method	boolean updatedValid();

## Sign up page



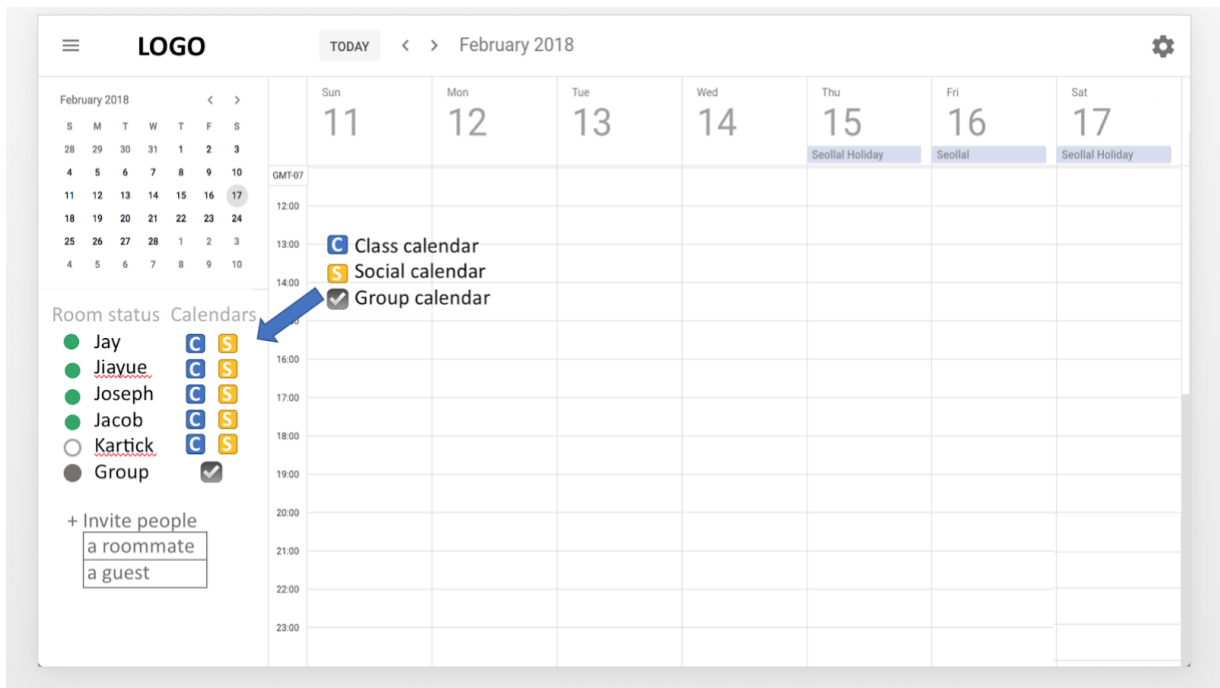
The sign up page features a white header bar with the word "LOGO" in bold black text. Below the header is a light gray main content area. Centered in this area is a white rounded rectangle with a thin gray border. Inside this rectangle, the title "Sign Up" is centered in bold black text. Below the title are four stacked text input fields, each with a light gray border and placeholder text: "Email", "Full name", "Display name (optional)", and "password".

## Create a housing Group Page



The "Create a housing Group Page" layout includes a white header bar with the word "LOGO" in bold black text. The main content area is light gray. Centered within it is a white rounded rectangle with a thin gray border. The title "What's your housing group called?" is centered in bold black text. Below the title is a text input field with the placeholder "Ex. 123 Main St". Further down, the text "Your housing URL (letters, numbers, and dashes only)" is displayed in bold black, followed by a text input field containing the example "123MainStreet.roommate.com". At the bottom of the rounded rectangle is a green button with the text "Create a housing portal" in white.

## Dashboard | Calendar Page



### Database

#### User Table

Username	Password	Name	Address	Cellnum	emergencyCellNum	Email	venmoHandle
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