Home-Security System

**Wednesdays**: Weekly team check in, discuss the project progress, talk about any issues with the source files.

**Sundays**: Code write-up due [will have the whole week to work on it]

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| **WEEK** | **JUSTIN** | **BHUMI** | **KANIKA** |
| 2/17 –  2/20 | Finish UML    Review the first draft of the requirement document | Roles and Responsibility document  Review the first draft of the requirement document. | Analyze Requirement document  Outline different sections of Requirement doc. |
| 2/24-3/1 | Model Analysis   * Design a rough sketch of the model and what classes would go for each module. | Analysis Diagram   * From the rough sketch determine the relationship between each classes * Extract the nouns and verbs | Model Interaction   * Draw a UML/OO Analysis diagram that shows relationship between classes and their methods. |
| 3/2-3/8 | **Set up Home-Alarm**   * Extract nouns and verbs. * Determine the relationship between the attributes and the methods working in the Home Alarm class | **Set up Client class/ Monitor**   * Determine the relationship between the class object’s attributes and methods in the Client class   **Set up News Feed**   * Extract nouns and verbs required for the class. * Separate the functions required to generate random reports with appropriate methods and attributes. | **Set up 911-Dispatch**   * Extract the nouns and verbs * Determine the relationship between the class object’s attribute and methods in the Home Alarm class |
| 3/9-3/15 | **Implement CO Detector object/methods**   * The Home Alarm implementation starts with implementing the sensors * Initialize the CO class attributes and implement required methods. | **Implement Client object/methods**   * Initialize the client information and the necessary attributes extracted from the previous week * Make sure implement the methods associated with the class | **Implement Fire Department object/methods**   * The 911-Dispatch implementation starts by implementing the different station services. * Initialize the fire department class attributes and implement required methods. |
| 3/16-3/22 | **Smoke Alarm object/methods**   * Next, implement Smoke Alarm. * Initialize the Smoke Alarm class attributes and implement required methods. | **Implement Motion Sensor**   * For the motion sensor class initialize class sensor attributes and implement the required method. | **Ambulance object/methods**   * Next, implement Ambulance station. * Initialize the Ambulance class attributes and implement required methods. |
| 3/23-3/29 | **Door/Window Sensor object/methods**   * Next, implement Door/Window Sensor. * Initialize the Door/Window class attributes and implement required methods. | **Implement News Feed**   * For news feed class the methods would be stimulated. Generate list of words nouns and verbs within the class to generate a random story. | **Police Station object/methods**   * Next, implement Police Station. * Initialize the Police Station class attributes and implement required methods. |
| 3/30-4/11  2 weeks | **Combine all sensors to Home Alarm**   * Now, all the sensors are implemented. * Next, the task would be to implement the Home Alarm class and add required methods to talk to Monitor. * Make sure to test and run the code. | **Implement the Monitor**   * Initialize the Monitor class and implement appropriate methods for the Monitor class to talk to the Client class. * The Monitor should also receive data from all the public methods. | **Combine all Stations ot 911Dispatch**   * Now, all the stations are implemented. * Next, the task would be to implement the 911-Dispatch class and add required methods to talk to the Monitor. |
| 4/12-4/19 | **Finalize Home Alarm**   * Once all the methods are implemented work on the final testing home alarm system. * Combine the implementation of the motion sensor and test simple cases within the console. | **Implement Monitor/Newsfeed connection**   * Now, both Monitor and NewsFeed classes have been implemented. Call on the method within the Monitor to get the story if requested by the client. * All these methods should be public. | **Finalize 911-Dispatch**   * Once all the methods are implemented, work on the final testing 911-Dispatch system. * Combine the implementation of the varied station classes and test simple cases within the console. |
| 4/20-4/29 | **Implement Monitor to Home Alarm connection**   * Once we have implemented and tested simple cases for the alarm system, work on connecting Monitor with the Home Alarm class. * Feed simple information and test both classes in console test run. | **Combine client and newsfeed to monitor**   * Once the Monitor has been implemented with all the public methods. * Work on getting the randomly generated new reports to the Monitor display and make sure to keep track of all the news reports. * Test and check simple console runs to make sure classes implement correctly. | **Implement Monitor to 911-Dispatch connection**   * Once we have implemented and tested simple cases for the alarm system, work on connecting Monitor with the 911- Dispatch. * Feed simple information and test both classes in console test run. |
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| 4/29-5/5 | **Implement GUI Sensor Info Arm and Disarm**   * Next and the final phase of the project would be to implement GUI and display all the buttons required by the system. The buttons should allow the clients to enter pin and display whether the system is armed/disarmed | **Implement GUI Emergency buttons**   * Alongwith that the GUI should also display emergency buttons that the clients can request for emergency service. Make sure the buttons are connected to the monitor and send reports accordingly. | **Implement GUI 911 Response Display**   * The last part of the GUI would be to implement the response display that the 911-Dispatch class will send to the monitor and the Monitor will display to the screen. |
| 5/6 - 5/17 | Debug: Thoroughly test all the class and methods by rigorously testing all the used cases.   * Making changes as while testing used cases and making sure that the implementation is aligned with the requirement document and the system works as mentioned in the documentation. * Make sure all the source files are working and have been uploaded in the repository. | | |
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| **May 11 – May 17** | **Final Project Due** | | |