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| **Name of Use Case:** | Emergency Response | | | |
| **Created By:** | CMPT 2276 Group 4 | | **Last Updated By:** | Hazel Phyu |
| **Date Created:** | 2023-03-05 | | **Last Revision Date:** | 2023-03-09 |
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| **Description:** | | Emergency services are notified when a senior presents alarming behavior detected by movement or button press. | | |
| **Actors:** | | Senior, Emergency Services | | |
| **Preconditions:** | | 1. Emergency service is available.   2. Heart rate is monitored every second.  3. The fingerprint recognition system is functioning properly.  4. The fingerprints are authorized (need passcode for emergency ?). | | |
| **Postconditions:** | | 1. Immediate family is notified/contacted. 2. Unauthorized unlock attempt is recorded for security purpose | | |
| **Main Flow:** | | Case 1:   1. Senior feels unwell and needs urgent medical attention or there is an unusual heart rate activity. 2. 911 is notified of an emergency. 3. 911 called senior to check if he/she is in need of emergency. 4. Door unlocked with passcode for emergency purpose.   Case 2:  1.Door is unlocked with unauthorized fingerprint for 5 attempts.  2. Security is notified.  3.Security checks security camera (may need to change use case diagram) | | |
| **Alternative Flows:** | | 3- In step 3 in main flow for the first case, if the senior is not reachable,   1. The location of the house is sent to emergency services with the type of threat identified by the system. | | |
| **Exceptions:** | | 1. In Step 1 of the main flow for the first case, if the unusual heart rate is due to some movement of the senior   1. System will have certain heart rate threshold programmed to reduce false alarm. | | |
| **Non-Functional Requirements:** | | The following requirements must be met before execution of the use case   1. Continuous internet connection. 2. Sufficient memory to store heart rate data / fingerprints /passcode. 3. The system should be able to operate / available at all times. 4. The system should be able to alert / response quickly (needs review). | | |