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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:** | | 1. Senior feels unwell and needs urgent medical attention or there exists a threat to their well-being. (Maybe should consider about heart rate too?) 2. 911 is notified of an emergency. 3. 911 called senior to check if he/she is indeed of emergency. 4. Door unlocked with passcode for emergency purpose. 5. Door is unlocked with unauthorized fingerprint for 5 attempts. 6. Security is notified. 7. Security checks security camera (may need to change use case diagram) | | |
| **Alternative Flows:** | | 3- In step 3 in main flow , 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 , 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) 5. SHOULD CONSIDER ABOUT SOFTWARE/HARDWARE FAILURE?? | | |