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| **Student Name** | **Student ID** | **Date** |
| Michael Wright | 100741876 | February 15th, 2011 |
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| **Use Case Name:** | **Handle Break-in** |
| **Brief Description:** | The system handler triggers its own internal sound alarm, broadcasts trigger signals to all cells, causing all alarms in the entire house to be triggered, places a phone call to a pre-defined phone number and finally writes the event to the log. |
| **Precondition** | The system is enabled.  A break in has not been invalidated |
| **Primary Actor** | Timer |
| **Secondary Actors** | Alarm, Phone Line |
| **Dependency** |  |
| **Generalization** |  |

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| **Basic Flow** | | |
| **Step #** |  | |
|  | The timer sends a signal to the system to initiate the handle break-in procedure. | |
|  | The system triggers internal sound alarm. | |
|  | DO | |
| **Step #** |  |
|  | The system sends a trigger system to a cell handler. |
|  | The cell handler triggers its connected alarms. |
| UNTIL all connected alarms have been triggered. | |
|  | The system places a phone call through the phone line | |
|  | The system logs the break in with all the relevant information. | |
| **Postcondition**: | Internal sound alarm has been triggered.  All connected alarms have been triggered.  Phone call has been made.  Event has been logged. | |

Test Plan:

1. Test ideal path, ensure post conditions met
2. Test execution if a cell handler is failed
3. Test execution if cell handler’s alarms have failed (>1)
4. Test execution if phone line has failed
5. Test if execution logger has fail
6. Test if execution internal sound alarm has failed.