Sam Lee

Austin Smothers

Ankita Jaswal

Matthew Calderon

Kees Van Muyden

3/2/18

CSC 131

Professor Chidella

Risk Management - PART I

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Statement | Predictable Risks | How To Handle The Risk | Unpredictable Risks | How To Handle The Risk |
| Owner of valuable item registers item with tag ID and owner details to the server. (writes to a file). | Wrong tag ID.  Misspelled owner’s name. | Check if the machine is working for correct tagging.  Check the spelling of the owner’s name. | Item doesn't register correctly.  Server crashes. | Keep maintenance of the server.  Make sure the server is 100% okay all the time. |
| Owner notifies that the item is lost to the server. (writes to a file). | User error: Owner accidentally notifies that an item is missing without knowing.  Owner finds item themselves and doesn’t report found. | Routinely notify the Owner of status on lost items so that accurate information on item’s status is being stored. | Owner’s notification does not process correctly due to server malfunction resulting in item not being notified lost to the system. | Have device software alert progress of the lost notification to the server to the owner upon completion or error. |
| The valuable item sends information about its TagID and GPS location. (since it is continuously beaming its location say at 10 minute intervals). (writes to a file) | Item destroyed by weather.  Item stolen and GPS removed.  GPS signal goes down. | Weatherproof the valuable item. Bolt it down, hide it, and have location logs submitted to the police.  Have signal trip alarms whenever the location changes or location goes silent. | The ISB that runs the GPS signalling forecloses. Foreign country knocks out all electronics with electromagnetic pulse | Develope revolutionary electronic-less GPS system made of recyclable materials safe for the sea turtles, that is EMP proof. |
| The Finder's cell phone picks up the TagID and GPS information (reads from a file). | The cellphone has low battery and dies or the cell phone becomes non- functional. | The GPS information of the TagID should be stored into a file or database as soon as it is located as a backup.  Using this last piece of information, another device can be used to track the lost item . | Server malfunctions causing the backed up file to get erased resulting in data loss. | Have multiple backup files for this information in different locations so that it is recovered. |
| Owner receives information from server that Item is found with GPS information (Search and match is done through files and a Print statement says "Owner X with Address Y is notified that Owner's item I with Tag ID T was found at GPS location G". The X, Y, I, T and G values are filled in. | After the item is found, it can get stolen and can be reset by an evil user. | Make sure the server is able to track the stolen item and the owner should be updated frequently.  If device is not yet reset, update password information from owner’s cellular device. | GPS information is wrong. | Create a GPS system that will give the correct information to the owner. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Predictable Risks | Solution | Unpredictable Risks | Solution |
| People | All members of development team have different time schedules. | Use a communication software like discord to mediate and discuss issues. | Team member gets injured by freak accident. | Send flowers and move on, the project must be completed. |
| Process | Server malfunctions causing the backed up file to get erased resulting in data loss. | Have multiple backup files for this information in different locations so that it is recovered. | Owner’s notification does not process correctly due to server malfunction resulting in item not being notified lost to the system. | Have device software alert progress of the lost notification to the server to the owner upon completion or error. |
| Product | User changes their mind and no longer wants to track their item with a tag. | Provide options for the user to unregister an item and delete their personal info that pertains to that item in multiple backup files. | Item destroyed by weather.  Item stolen and GPS removed.  GPS signal goes down. | Weatherproof the valuable item and have location logs saved of last known location.  Have signal trip internal alarms whenever the location changes or location goes silent. |