

Project Management Assessment. This is an “internal” document for your team outlining some of the strategic decisions that you have made (or are considering). This should address:

- Development Tools to be adopted/considered for adoption
- Consideration of hardware/software resources
- A high level risk assessment that documents major components of the system and the degree to which your group is currently capable of delivery this kind of functionality.

### **1. Development Tools to be adopted/considered for adoption:**

Online team collaboration tools to be used:

- Trello
  - Online to-do list outlining progress, to-do, tutorials, libraries, etc. All team organizing is done here.
- BitBucket
  - Source code hosting provider. Uses git code management software as backbone. This is for source code management, joining, and testing.
- Google Drive
  - Used for online documentation, like this, for all members to edit, view, and create all team documentation used for project. May also be used to upload any files that are not Python source code related.
- IDE
  - IDE is still being discussed. Eclipse with Py-Dev plugin has been mentioned and recommended but is completely optional and still up for discussion. If Py-Dev is not a requirement for team members, Python IDLE can be used.

### **2. Consideration of hardware/software resources:**

All team members are required to have the minimum installed on personal computer being used to code:

- Python v2.7
- Webcam (USB/integrated)
- git
- active internet connection for code uploading

### **3. A high level risk assessment that documents major components of the system and the degree to which your group is currently capable of delivery this kind of functionality.**

### Major Components:

1. Webcam feed-
  - We will depend on Python Libraries allowing us to access and process video from the webcam.
2. Motion Detection-
  - Our team has no experience with Image Processing. We still feel confident we can achieve a motion detection function utilizing pixel contrast.
3. Email Integration-
  - Python library will also be used in the task of emailing all requirements to end user.
4. Online Hosting Provider Integration-
  - Dropbox Python API will be used in process of uploading recorded motion detection footage. Link to video will then be emailed to end user.
5. GUI-
  - Our team has experience creating GUIs using Python's TkInter library.
6. Programming Experience- (Change name probably)
  - All members have completed Intro to Computing and Data Structures courses taught in the Python programming language. All members are either learning or have learned OOP programming design.