

Test Plan

# Product Analysis

Who will use it?

The main user for the software will be machine learners that specialise in creating Convolutional Neural Networks.

What is it used for?

It is used to annotate visual datasets in pictures.

How will it work?

1. The user loads an image into the software
2. The user creates classes
3. The user selects and appropriate shape and draws a label over a section of the image that is an object of one of the classes
4. The user assigns the label to a class
5. The user saves the annotations to a file
6. The user loads the file when they need it for later use

What are the software/Hardware the product uses?

- A computer
- Visual Studio
- A web browser
- File Explorer

# Test Strategy

# Testing Scope

## Requirements:

- User can specify the target folder containing the photos
- A pane listing the compatible image files available in the folder
- The pane should sort descending by file name
- The pane should sort ascending by file name
- The pane should sort descending by file date
- The pane should sort ascending by file date
- Have a class selector with a browse button where the user can navigate through the folders and select the files identifies
- All the classes should be listed in the class pane with the possibility to sort ascending or descending
- Users should be able to add and remove classes
- The user must be able to select and use one of the following shape options
  - Square
  - Rectangle
  - Trapezium
  - Polygon up to 8 sides
- The user must only use the provided shapes for annotating the given image
- Be able to save an annotations file containing the number of annotated images, an image file name, number of shapes per image and the x and y positions for each point that defines the shapes
- Change the name of an existing annotations file.
- The annotations file must follow the hierarchical data format 5 (HDF5) standard
- The selected image should be displayed in the image pane
- The user should be able to perform shape operations using the mouse

- Must use the data structures developed during the 1<sup>st</sup> term labs for storing data in memory
- Groups must use a sort and search algorithm, implemented in the 1<sup>st</sup> term labs.

Project Budget

£0

## **Product Specification**

### **Skills and Talent of test Team**

Unknown

## **Testing Type**

- Unit Testing
- Integration Testing
- Acceptance Testing
- Installation Testing

We will be doing unit, integration and installation testing.

Acceptance testing is something that is performed by the client therefore we will not be doing it.

## **Document Risks and Issues**

## **Test Logistics**