

1.2 PRODUCT AIMS AND OBJECTIVES.

1.2.1 AIMS.

The core aims of this project are: 1. Design and implement an application that will lower the bar of the average user to create typeface fonts. 2. Provide a simple, user-friendly and intuitive user interface.

In order to achieve the core aims the application will need to:

1. Receive input of handwritten text images.
2. Perform image processing and analysis techniques to influence output.
3. Compose typeface fonts influenced by image processing and analysis.
4. Provide formatted output for installation and/or sharing.

1.2.2 OBJECTIVES.

These four points provide natural segmentation into four stages of development:

1. Image Processing and Analysis.
2. Letterform Composition.
3. Font Formatting.
4. User Interface Development.

The project objectives allowing for achievement of these aims will be:

1.2.2.1 IMAGE PROCESSING.

1. Gain insight Image processing techniques including.
 - 1.1 Image Acquisition, Image preprocessing, Image Enhancement, Image Segmentation, Object recognition, Character Recognition.
2. Compile list of typographic features required for extraction from handwritten text images.
3. Analyse image processing techniques best suited for extraction of typographic features from handwritten text images.
4. Collate, deconstruct and analyse required image processing algorithms to produce pseudo code.
5. Evaluate suitability of methods, testing algorithms with sample images. 6. Implement and test.

1.2.2.2 LETTERFORM COMPOSITION.

1. Understand, design, develop algorithms for creation and manipulation of bezier curves.
2. Develop letterform templates required for manipulation / translation.

1.2.2.3 FORMATTED OUTPUT.

1. Develop methods to convert manipulated templates to SVG format for output.

1.2.2.4 USER INTERFACE.

1. Create Wireframes and storyboards for various states of the user interface. 2. Develop prototype user interface to finalise state transitions, UI copy, and UI design.
2. Implement and testing.