

Software Development Plan

What software?

The software needed will be modularised into the following two modules:

- Software for removing noise from normalised iris images and reconstruction of eliminated pixels.
- Software for histogram stretching of images.

Purpose?

- Optimise the code.
- Testing to ensure correct computations.

Overall plan

Implement code in Python

Document

Implement necessary testing methods and test code.

Optimise code.

Development plan and framework

Due to the fact that the program we need to implement is well known and the specifications as well, it is not as dynamic as research normally causes. Furthermore, there are two parts that could be implemented simultaneously. We therefore go for the pragmatic developing model:

- System specifications and design will be specified
- The different modules will be implemented and documented immediately afterwards.
- Then they will be tested.
- The following step will be to optimise and then test again.

Testing

During testing unit testing will be implemented and applied.

Optimisation

The process of optimisation will look into more compact ways to get the same functionalities. This might include functionalities from useful libraries. Furthermore, the process will investigate the possibility of utilising parallel computing. The optimisation will be evaluated in respect to computing time and tools needed for measuring this will be used.

Documentation

Besides the documentation in the code an issue tracker/lab log will be kept in order to keep track of the steps done during development.