

Table 1: Revision History

Date	Developer(s)	Change
2016-09-30	Elton Schiott	First revision of document
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SE 3XA3: Development Plan

Title of Project

Team 05, Q-aRt QTs
Elton Schiott
Emilio Hajj
Liam Duncan

This is the development plan for the project.

1 Team Meeting Plan

The team will meet on Tuesdays and Fridays for approximately one hour at 2:30 PM. These meetings will occur regularly every week on the first floor of Thode library. A meeting chair will be assigned ahead of time for each meeting in order to keep discussions on track and make sure all issues are addressed.

2 Team Communication Plan

Tasks will be assigned in meetings. Other than in meetings the team will communicate mainly through 2 means. The first is Git issue tracking, which will be used to communicate the status of documents and files that are currently being worked on. Other communication, such as organizing meetings, changing plans, and more urgent messages will be relayed through a group on Facebook.

3 Team Member Roles

There is no team leader assigned for the group, however one team member will be assigned the role of chair for each meeting and this responsibility will cycle through the group members. Notes will be taken at each meeting by the chair.

Elton Schiott will take the lead role in documentation using LaTeX and review of past milestones. Emilio Hajj will maintain the Gantt chart and make sure tasks are completed on time. Liam Duncan will focus on the implementation of the project. However, each member will be assigned tasks and contribute to all areas of the project.

4 Git Workflow Plan

Git centralized workflow was selected as the method for the development of the project.

5 Proof of Concept Demonstration Plan

The proof of concept will be a simple implementation of a QR encoder. The input will be an alphanumeric string and the program will generate a standard QR code that, when scanned will read as the input string. This is the most difficult part of the implementation, as the artistic representations of QR codes will be generated using a similar method, and the GUI has few inputs and functions, thus will not be difficult to implement.

The main risk in the redevelopment of this project is that the algorithms used to generate the QR code are difficult to understand and implement. If the proof of concept is able to successfully generate correct, functional QR codes, this will demonstrate the required knowledge to fully develop the encoder. This will include the artistic QR code generator functionality. Testing may also be a concern, since it will not be easy to unit test the QR codes that are generated for correctness. Comparing the binary strings generated by the group's implementations may be tested against those created by the original implementation or other QR code encoding software to verify that the software functions correctly.

6 Technology

The programming language to be used for the development of the software will be Python as the original project uses this language and all group members are comfortable with its use. The IDE of choice will be Geany and documentation generation will be done using Sphinx.

7 Coding Style

[Google's Python style guide](#) will be used for any Python code in the project.

8 Project Schedule

Details about the project can be found in the [Gantt chart](#).

9 Project Review