Defect Tracking Policy and Workflow

Michael Ghaben

February 2, 2017

This section introduces the software tracking, versioning, and tools used by the Low-Comotivation group. This section is broken down into two subsections:

1. A numbering and versioning policy for the software released
2. A software defect tracking & resolution policy
3. Development Tools

0.1 Numbering and Versioning

Unless otherwise stated, the numbering and versioning of the software utilized throughout this project will be completed by be numbered according to the GitHub commit that is being referenced, until the prototype demonstration. This will be versioned 1.0.

Additionally, the numbering of issues will be chronological and generated by GitHub. Issues will be referred to by the GitHub generated number. This includes bugs and missing features.

0.2 Defect Tracking and Resolution

When a defect is observed in the code, a GitHub issue will be raised with the 'bug' tag. After this recording, the individual who observes the bug will mark the bug with a comment of the following form:

```
\bug {<description of bug>}
<code block>
```

which will automatically document the bug in Doxygen [1] After raising the GitHub issue, a team member will then be assigned to the issue. After the issues successful resolution, the GitHub issue will be closed with a reference comment to the commit which resolves the issue.

[1] We are aware Doxygen is licensed under the LGPL software. This does not include software which utilizes Doxygen to produce documentation

0.3 Development Tools

During the course of the execution of this project, we will utilize:

- GitHub: GitHub will be utilized for version control as well as source control
- Slack: Slack will be utilized for informal discussion among the group members to discuss bugs, planning, and presentation coordination. Web hook integration for GitHub integration and issue tracking will also be utilized.
- Travis-CI: Travis-CI will be utilized in conjunction with the Maven build system to provide software testing
- Maven: Maven is a cross-platform Java build system that will be used for automated testing and automated building