

ZippyShopper Software Quality Assurance Plan

ZippyShopper

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Revision History

| Date | Update(s) | Version | Author |
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1. Purpose and scope

The purpose of this software is to help shoppers create more efficient routes through the store when they create a shopping list. This will afford our users to limit the amount of time wasted in a store by backtracking and searching for items, all while organizing their shopping list into a consistent pattern. It is the purpose of the SQAP to ensure that the software functions at a high level, such that users will enjoy the average use cases, and that the average use case is available to the vast majority of users. This is to ensure a viable product that provides promised value to the end users. We are under contract to ensure:

1. The software is error free
2. The software is preformant (runs quickly on most devices)
3. Errors, when encountered, are handled in ways that leads to quick and effective correction.

We will attempt to accomplish these goals by creating extensive unit tests for each part of the software, measuring the efficiency of the software by timed assessments of it running, and encouraging software design that lends itself to quick and efficient changes/bug fixes. See [CONOPS](#) for more detail.

2. Definitions and acronyms

SQAP: Software Quality Assurance Plan

CONOPS: A document that describes what the app should do from a user's perspective.

IEEE: Institute of Electrical and Electronics Engineers

3. Reference documents

- Contract - Name, Organization, YEAR, link
- CONOPS - Name, Organization, YEAR, link
- 730-2014 - IEEE Standard for Software Quality Assurance Processes, IEEE, 2014.
Available: <https://ieeexplore.ieee.org/document/6835311>

4. SQA plan overview

- 4.1. Organization and independence
- 4.2. Software product risk
- 4.3. Tools
- 4.4. Standards, practices, and conventions
- 4.5. Effort, resources, and schedule

5. Activities, outcomes, and tasks

5.1. Product assurance

- 5.1.1. Evaluate plans for conformance
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- 5.1.3. Evaluate product for acceptability
- 5.1.4. Evaluate product life cycle support for conformance
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6. Additional considerations

- 6.1. Contract review
- 6.2. Quality measurement
- 6.3. Waivers and deviations
- 6.4. Task repetition
- 6.5. Risks to performing SQA
- 6.6. Communications strategy
- 6.7. Non-conformance process

7. SQA records

- 7.1. Analyze, identify, collect, file, maintain, and dispose

7.2. Availability of records

References

[1] 730-2014 - IEEE Standard for Software Quality Assurance Processes, IEEE, 2014.
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