AT2

Movie Database Application

Software Review Plan

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Course:

Diploma of Software Development – Rapid Application design

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# Introduction

The software review plan is a very important part of the software development life cycle (SDLC), it helps the software engineers to validate the quality, functions, and other vital requirements of the software and to examine the software (Professional QA, 2020). The software would be examined by the project personnel, managers, client, and users of the software for approval and comments for the room for improvement of the software.

There is also a minimum acceptable requirement guideline to follow according to the IEEE standard for software reviews and audits. The standard which does not meet the “systematic” minimum requirement attributes such as team participation, documented result of the review and documented procedures for reviews will be considered to be a “non-systematic” reviews. (IEEE, 2008)

# 2 Types of software reviews

2.1 Software peer review

Peer review is the process of evaluating the technical content and quality of the product. It will be conducted by the developer and the scrum master. The purpose of peer review is to provide a discipline engineering practice for detecting and correcting errors of the software. (Professional QA, 2020)

Types of peer review

Code review - to fix mistakes and remove the vulnerabilities from the software product in order to further improve the quality and security of the product.

Pair programming – to review the code by all the programmers which works on a single workstation to develop a code together.

Informal – referring to a informal review of the code by the team to review the program for suggestion and also to agree that the software is of satisfactory.

Walkthrough – is where the designer or the lead of the software development team go through the software product and ask question regarding the software, make necessary comments regarding the various defects and errors of the software.

Technical review – is where a team of qualified personnel review the software and examine the software functionality and define its intended use as well as to identify various discrepancies.

Inspection – is where experienced and qualified individual examine the software products for bugs and defects using a defined process to give the team their opinion and improvement on the software if exist.

2.2 Software management review

The advantages of the code optimization (Monus, 2020):

* Gives you cleaner code base
* Increase the consistency of the software
* Allow the software to run faster
* Increase code readability to allow the team to improve on better workflow
* Increase refactoring efficiency
* Easier code maintenance and allowing quicker feature development in future

2.3 Software audit review

Software audit review is a type of external review where one or more auditors which is not part of the development team conduct an independent examination of the software to assess the compliance with stated specification, standards, and other important criteria. This stage is to be done by the managerial level personnel. (Professional QA, 2020)

# 3 Formal Review VS Informal Review

Formal and informal review are two very important type of review that are used commonly by the software engineers in order to identify the defects of the program and to discuss of alternative ways to resolve those issues or discrepancies of the software. (Professional QA, 2020)

3.1 Formal review

Formal review is a type of peer review, it follows a formal process which has a specific formal agenda while running a review on the software. It has a well structured and regulated process to it. It is usually implemented at the end of each life cycle. In this process a formal review panel or board considers the necessary steps for the next life cycle. (Professional QA, 2020)

Features of formal review includes:

* Evaluation conformance to specification and standards.
* Conduct by a group of 3 or more.
* The review team petitions the management of technical leadership to act on the suggested recommendation.
* The leader have to verify that the action documents are verified and incorporated into external process.
* The six important steps of formal review consist of planning, kick-off, preparation, review meeting, rework and follow up.

3.2 Informal review

Informal review refers to the times during the development stage of the software development process of the software. The difference between formal and informal review is that the formal review is to follow a formal agenda of the software, where informal review is to be conducted anytime that is needed by any of the team. It is a more time saving process and it does not require anything to be documented neither does it requires a group of people. (Professional QA, 2020)

Features of informal review includes:

* It could be conducted with 2 or more people which includes the designer or any interested party.
* The team identifies the errors and issues and examine alternative.
* It allows the team members to learn.
* Changes will be made by the software designer.
* Changes will be verified by other project controls
* The purpose if to keep the author informed regarding the issue and to improve the quality of the software.

# 4 Review User

To ensure that we were to release a satisfied software to the client the programmers and the manager will first try out the software to make sure that we as a user of the software is satisfied with the software before allowing our client to try out the program. They will then give us a feedback regarding the software if they do have a suggestion for any room of improvement regarding the software. Once everything is accepted, we would also leave the contact email on the software so that the users of the software could also send us a feedback, bugs, or errors that they faced while using the software. (Professional QA, 2020)

# 5 Software Review Plan to be implemented

All steps of the review plan will be implemented as it is a very important process for the development of the software and also to ensure that the best of the software could be implemented and presented to the client and users without any defects in the software which we produce.

# Software Review Checklist

|  |  |  |
| --- | --- | --- |
| S/N | Requirement | Yes No |
| **UI DESIGN** | | |
| 1 | Is user interface clear and easy to use |  |
| 2 | Is the performance of the software acceptable |  |
| 3 | Is all the functions of the software (If no, please indicate below) |  |
| 4 | Is the admin page easy and clear to use |  |
| 5 | Is the software responsiveness working on multiple devices |  |
|  | **Security** |  |
| 6 | Is the admin page safely secured |  |
| 7 | Does the admin password meet the minimum complexity requirements |  |
|  | **Functions** |  |
| 8 | Are you able to search movie with just the name |  |
|  | Are you able to search for movie with just the genre |  |
| 9 | Are you able to search the movie with just the rating |  |
| 10 | Are you able to display the top 10 searched movie graph |  |
| 11 | Are you able to subscribe and unsubscribe from newsletter and flashnews |  |
| 12 | Is the admin able to receive the email when a subscriber request to unsubscribe |  |
| 13 | Can the admin search for a existing user in the admin page |  |
| 14 | Can the client rate the movie. |  |
| 15 | Are you able to display the top 10 rated movie graph |  |
| 16 | Is the webpage WCAG qualified |  |

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