Feasibility Report

Bug Reporter

Introduction

The Bug Reporter is for use in an office setting or a team environment, it will be used to create a log, describe the bug and the conditions which made it appear, share images of the bug’s output, and have version control for bugs in different versions.

The Bug Reporter will be a C# based application and will act as a way for developers to communicate and share details about errors within code they are developing and display any ongoing errors as well as keep track of bugs that have been fixed previously.

The program will create logs which will involve details on how the problem happened, the application being worked on, the version of the application and any additional details about the problem which might help troubleshoot it and resolve the error.

Background

Developing as a team can be difficult as it is hard to see changes and what problems other team members are working on at a specific time, that is why programs like GitHub exist, it allows multiple developers to work on a project without interfering with each other using branches and allows the company to see who worked on which part of the code.

This program aims to solve some of the communication issues that can arise with multiple developers, with the reporting of bugs it will act as a centralized area for developers to report bugs in order to make the code more reliable.

There are already programs which solve this issue; however, I want to create one which can be more directly integrated within a development environment without any security risks. Having a list of bugs and exploits for existing or new programs would be a large security risk as bypasses and vulnerabilities could be found and exploited if a bad actor has a list of said vulnerabilities. Therefore, a local SQL server would be more secure than an external one which is not managed by the company.

This program has a large scope but many different additional parts can be removed with the program still being able to function correctly, for example comments, who created the report and images. This allows for the program to still meet the requirements of a functioning bug tracker but without the quality-of-life additions.

Development of the program after launch would also be a possibility with new features and functionality added after deployment.

Outline of Project

The objective of this project is to:

* Develop a central database where logs can be stored
* Allow for new bug logs to be created and uploaded
* Allow for bugs to have descriptions which can change with time
* Search for existing bugs
* Save and share attachments for screenshots within the bug logs
* Sort bugs by application and version along with classifying bugs depending on version or application
* Confirmation of the bug, this determines if the bug is repeatable
* The type of bug or what part of the program is giving the error
* Who created the bug report
* When was the bug first discovered, this will allow the users to link old bugs together
* The date when the current bug log was created and resolved
* Share comments about the bugs from other developers

The program will be coded in C# using windows forms along with an SQL backend, all the required technologies are freely available and the technical skills required to complete the project are manageable.

During development the SQL server will be hosted locally but in later implementations it will be hosted on a company server, the demand from the server is very low since the server should not be accessed too often and when it is accessed the amount of data being transferred is relatively low with the highest amount of data use coming from pictures being sent to and from the server.

From these objectives and requirements, the project is feasible on a technical level.