CS425 Exit Strategy

The end of the CS425 semester will produce a core component of the final product. The core component will be created from refining prototypes that model system functionality. The component will be the framework for the client server system and provide basic functionality of the file visualization. The system will have a functioning database to store the repository metadata. This component will demonstrate the basic functionally needed to select a repository, store the metadata and display a simple visualization of the repository. This will require each subsystem to undergo unit testing and integration testing the subsystems’ interfaces.

CS499 Exit Strategy

The CS499 semester will add more advance functionally to the system and usability documentation for longevity quality assurance. The main focus will be the scoring algorithm for the bug hotspots which will incorporate many dynamic metrics. Each metric will require proof-of-concept analysis on effectiveness which entails performing many tests. The test will compare results against known static metrics and if possible existing code analyzing programs. The metrics will be approve or rejected based off the results and since time is a factor only so much research and testing can be done. Next the visualization output will be improved more advance display options and with the addition of the scoring algorithm results integrated. All server side functionality will be implemented as APIs and documentation will be created for integration and use. Once all the metrics have been tested and approve the system will be demonstrated using different existing git repositories found online. The project will be delivered in two part the web page front end and server backend. The backend will contain a majority of the project and be built modular so more functionality can be added via new APIs. This also means the front end can be rebuilt and modified by using the backend APIs. The client will have admin access and complete control over the system when delivered.