The implemented features in the text editor are

- File I/O,

 - Command mode and edit mode

- Undo/redo functionality.

- Syntax highlighting

- Text wrapping although there is an issue where the characters at the beginning get erased as new characters are written and it exceeds the size of the view.

The only design pattern I pretty much used was Model View Controller which I heavily relied upon although there is a bit of observer. I could've used more of observer design pattern however the implementation of showing the change of edit and command mode was already easy enough with MVC. I could've also used Command however I managed to get undo redo working well with just MVC. To sum up my choices of design patterns I enjoy utilizing MVC and the implementation is rather intuitive to me compared to the others.

As to my knowledge of bugs, I believe I have fixed them all, there were times I was getting segfaults and out of range errors however they have been resolved and I spent ~30 minutes testing out edge cases I could think of and no bugs arose in that time.

Please watch the video as I demo the functionality of all my code in ~2 minutes. As the video was too large for gradescope submission here is the link

https://youtu.be/Z2WCjUwbC3Y