### Formalized Proposal

The Cake Customization System is a project designed to streamline and optimize the management of cake orders in a bakery setting. Initially conceptualized as a basic order tracking application, the project evolved into a more comprehensive system, encompassing aspects of customer management, order processing, and data sorting. This evolution was guided by the specific needs of a bakery environment, where efficiency, accuracy, and customer satisfaction are paramount..

### Time/Change Logs

Throughout the development process, regular updates and revisions were made. Key milestones included the initial implementation of the order management system, the integration of the GUI, and the final optimization of the sorting algorithm. Each week was dedicated to a specific aspect of the project, starting with the basic framework, followed by the development of the GUI, and concluding with the refinement of the sorting and search functions..

### Lessons Learned

### The project's scope expanded from a simple order tracking tool to a comprehensive management system. This shift required a reevaluation of the initial design to accommodate additional features like customer management and urgent order prioritization. Challenges faced included optimizing the GUI for user-friendliness and ensuring the reliability of the sorting algorithm. Solutions involved iterative testing and incorporating user feedback into the design process.

### CODE including comments

My project, Awesome Project Titles is at [http://github.com](https/github.com)/myusername

### User's Manual

图形用户界面, 应用程序, Teams

描述已自动生成

图形用户界面, 文本, 应用程序

描述已自动生成

The code is thoroughly commented to ensure clarity and ease of understanding. It adheres to standard Python coding conventions for readability and maintainability.

电脑前的人

描述已自动生成图形用户界面

描述已自动生成图形用户界面

描述已自动生成图形用户界面, 应用程序

描述已自动生成

To run the program, execute the main Python script. The GUI will provide options to add new orders, process and display existing orders, and delete orders. Users can enter order details through the interactive interface, and the system will handle the sorting and management of these orders.

### Conclusion/Summary

MERUSE Principles:

Maintainability: The code is well-commented and follows standard conventions.

Efficiency: Quick Sort algorithm is used for fast order processing.

Reliability: Thorough testing ensures consistent performance.

Usability: The GUI is designed for ease of use and intuitive interaction.

Scalability: The system can easily be expanded to include additional features.

Project Summary:

The Cake Customization System represents a significant step forward in automating and optimizing bakery order management. It combines efficient data handling with user-friendly interfaces to create a seamless experience.

Future Versions:

Plans for future versions include integrating a database for persistent storage, adding network capabilities for remote access, and implementing machine learning algorithms for predictive order analytics.