Submssion Document: Group Epsilon

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1   Contributions

This section describes the contributions that each member made.

1.1   Member One: David Auchterlonie

David was tasked mainly with assisting in the development of the 'Front End', as well as various utility tasks. This form of development involved creating the User Interface (UI) screen for the login, various data validity checks, and assisting where needed. This member worked on the majority of the scripts within the system, if not actively in development then in maintenance and updates. These included: Main_UI (188 lines), Fridge_UI (163 lines), Box_UI (238 lines), Sample_UI (401 lines), Search_UI (533 lines), Auto_Billing (295 lines), Scheduled_Billing (12 lines), UnitTest (465 lines), User_CredentialCheck (115 lines). They also contributed to the User Manual and Technical Report.

David attended all meetings.

1.2   Member Two: Ivan Von Staden

Ivan was tasked with the development and maintenance of the backend. The backend facilitated interaction between user inputs and the database. The backend was also responsible for auxiliary functionality like logging and auto-sample addition. This included the development of the files DataAPI (679 lines of code) and setupAPI(135), LoggingAPI(46). This member also implemented the unit tests - UnitTests (464 lines). He also wrote the technical report with help from member Four and helped create data for testing purposes.

Ivan attended all meetings.

1.3   Member Three: Jesse van der Merwe

Jesse was tasked with helping Ivan with the development of the backend. This included the development of the files DataAPI (679 lines of code), SetupAPI (135 lines) and LoggingAPI (46 lines). This also included implementing unit tests - UnitTests (464 lines). Jesse worked with David to design and implement the billing system, which included the following scripts: BillingUI (65 lines), AutoBilling

(295 lines), ScheduledBilling (11 lines). This member worked with Ivan on implementing the automatic sample adding system, as well as the stock take user interface, which includes AutoUI (116 lines) and StockTakeUI (74 lines). Jesse implemented the view mode - ViewModeUI (225 lines) - and helped David and Matthew with the user interface in general. Jesse aided the other members in writing the technical report and user manual, and wrote the README.md file.

Jesse attended all meetings.

1.4 Member Four: Matthew Cresswell

Matthew was tasked with the design of all 'Front End' development. This form of development involves creating User Interfaces (UI) and developing functions to communicate the database functionality to these User Interfaces in order for the application to be used. Matthew worked on all the different UI screens of the system and helped to create or implement the various UI scripts on the system including; Main_UI (188 lines), Fridge_UI (163 lines), Box_UI (238 lines), Sample_UI (401 lines), Search_UI (533 lines) and ViewMode_UI (225 lines). Matthew created all the search functions within the system (310 lines of code). He also wrote The User Manual with the aid of Member one and made contributions to the technical report.

Matthew attended all meetings but one due to connectivity issues (Load Shedding).

2 Acknowledgements

2.1 Libraries Used

We used the tkinter library (including tk treeview, messagebox, combobox, etc.). Other libraries include the TK Calendar, FPDF, pip, and pip3 libraries. We also made use of the Crontab scheduling tool.

2.2 Sources

- Crontab: https://www.computerhope.com/unix/ucrontab.htm

- Pip: https://pypi.org/project/pip/

- Pip3: http://manpages.ubuntu.com/manpages/disco/en/man1/pip.1.html

- Documentation for treeview: https://tkdocs.com/tutorial/tree.html

- General coding practices and advice: https://stackoverflow.com/

- Tkinter: https://wiki.python.org/moin/TkInter

- tkcalendar: https://pypi.org/project/tkcalendar/

- FPDF: http://www.fpdf.org/

- Scott Hazelhurst for consultation and advice.

3 Signatures

We all certify that the above information is correct.

Name	Student number	Signature
David Auchterlonie	1585335	
Ivan Von Staden	1838664	
Jesse van der Merwe	1829172	
Matthew Cresswell	1834243	