**DOCUMENTATION FOR THE POS SCRIPT**

The function “test\_gspread” reads the google sheet and prints the information that in the document

The Class “Backend” controls the communication from the QML files, which load the Graphical User Interface, to the Python script. It makes use of “Slot and Signal” classes that are provided by the “QtCore” module. The class “Signal” sends information from Python to QML and the class “Slot” receives information from QML—enabling communication between scripts.

The list “report” keeps record of the transactions that occurred in the running session. The dictionaries “supersheet”, “adminsheet”, and customersheet” contains the login information of the super admin, admin, and student respectively.

The function “closeapp” prints the information contained in the report list and closes the application by calling the “app.quit” function

The “finishedprocess” Signal send information from Python to QML telling it the correct page to load next. The signal is sent with the “emit” method and the information to be sent is argument of the method.

The function “superuser” is called when a super admin logs in. It checks if the user exists in the Google sheet, then confirms the correct password and loads the next page

The function “superadminlogout” is called when a super admin logs out. It sets the current super admin to an empty string. Meaning no super admin is logged in at the time.

The function “adminuser” is called when an admin logs in. It checks if the user exists in the Google sheet, then confirms the correct password and loads the next page

The function “adminlogout” is called when a super admin logs out. It sets the current admin to an empty string. Meaning no admin is logged in at the time.

The “loggeduser” Signal tells the QML file which user is logged in and displays his name/reg no.

The “accbalance” Signal tells the QML file the available balance of the logged in user and displays his balance.

The function “studentuser” is called when a student logs in. It checks if the user exists in

the Google sheet, then confirms the correct password and loads the next page

The “featuremode” Signal tells the QML file what activity (purchase/transfer/register) is being performed.

The function “feature” records the activity currently being performed in the class attributes

The function “switchfeature” emits 3 signals telling the QML file the name of the still logged in user, the newly selected activity and the available balance of the logged in user

The function “purchasefeature” records the amount a user spent in the class attributes

The function “transferfeature” records the amount a user transferred, the user it was transferred to, and the method of log in –in the class attributes

The “invalid” Signal emits to the QML file if the registration fails due to the fact that the biometric detail has been assigned to someone or a reg no was incorrectly typed

The function “registeruser” is called when a student wants to register their fingerprint. It checks if the user exists in the Google sheet, then confirms the correct password and loads the next page

The function “userlogout” is called when a user logs out. It sets the current user to an empty string. Meaning no user is logged in at the time.

The function “log” receives an instruction code depending on the activity performed and its status and prints the report message and appends the message to report lists