MoneyLab – Julia Marchenko – 138820238 – 09/27/24

**Class Diagram**

**A screenshot of a computer screen

Description automatically generated**

**Object Sequence Diagram**

Create an income transaction

A diagram of a project

Description automatically generated

Create an expense transaction

A diagram of a diagram

Description automatically generated

Query Financial Transaction

A diagram of a computer program

Description automatically generated

**Coding**

**IncomeTransaction.h**

public class IncomeTransaction {

int ID;

String desc;

double TransAmount;

double HSTAmount;

String TransDate;

}

**ExpenseTransaction.h**

public class ExpenseTransaction {

int ID;

String desc;

double TransAmount;

double HSTAmount;

String TransDate;

}

**PaymentType.h**

public class PaymentType {

int paymentTypeid;

String paymentTypeDesc;

}

**UIController.h**

public class UIController {

getPaymentTypes()

viewTransactions()

confirm()

}

**DomainController.h**

public class DomainController {

getPaymentTypes()

listofpaymenttypes

enterIncomeTransaction(transAmount, transDate, desc, HSTAmount, ID)

verifyData(transDate, desc, transAmount, paymentTypeID)

enterTransactionInformation(transAmount,transDate,desc)

float calculateHST(HSTAmount)

save()

seeIncomeRange(startDate,endDate)

float addtoTotalSale(TransAmount)

float calculateHSTCollected(HSTAmount)

float AddToTotalExpenses(Transamount)

float calculateHSTPaid(HSTAmount)

float calculateProfits(totalRevenue,totalExpense)

float calculateHST(totalHSTCollected,totalHSTPaid)

}

**EntityManager.h**

public class EntityManager {

persist(object)

get(class,selection)

}