

**Team:**

Andrew Lee

Jake Broadwater

**Title:****Project Summary:**

We are trying to create an online banking system in which users have accounts. With their accounts, they will be able to withdraw, deposit, and keep track of their money. It'll be able to tell the user a history of past transactions and deposits.

**Project Requirements:**

As a user I should be able to log in and deposit and withdraw money. ID 30

As a user I want to reset my password if I forget it ID 31

As a user I want to be able to get my transaction history ID 32

As an admin I should be able to log in and do administrative functions ID 33

As an admin, I want to set up the server and database once the source code is downloaded ID 34

Functional requirements:

Account information stored in hash table ID 35

Only admins can modify how the accounts are stored ID 36

UI displaying interactable features ID 37

Non functional requirements:

Logging in should be quick and seamless ID 38

Relevant information should be backed up ID 39

**UI Mockup:**

This is the first page users will see when they open up the website. It will prompt them for their username and password or have them sign up if they don't already have an account

Username:

Password:

[Log in](#) | [Sign up](#)

AccountID	2/20/2018	McDonald's	-\$9.29
Current Balance: \$10,240.59	2/20/2018	Best Buy	-\$100.50
	2/20/2018	Taco Bell	-\$5.24
Deposit	2/20/2018	CU Bookstore	-\$1402.30
Withdraw	2/20/2018	Coinbase	+\$1.07
This is the main homepage for users. The left side contains the user's ID, their current balance, and buttons for depositing and withdrawing money. The rest of the page contains purchase history such as the date, where the purchase was made, and transaction amount.	2/20/2018	Coinbase	-\$100.00
	2/20/2018	Coinbase	-\$100.00
	2/20/2018	Payroll	+\$500.89
	2/19/2018	Chipotle	-\$8.29
	2/19/2018	Riot Games	-\$20.00

AccountID	How much would you like to withdraw?
Current Balance: \$10,240.59	<input type="text"/>
Deposit	Select card to withdraw to:
Withdraw	<input type="text"/> <input type="button" value="v"/>
This is what is seen when making a withdrawal	Or add a new card:
	Name on Card: <input type="text"/>
	Card Number: <input type="text"/>
	CSV Number: <input type="text"/>
	Expiration Date: <input type="text"/>

AccountID

Current Balance:  
\$10,240.59

Deposit

Withdraw

This is the menu the user sees when they are trying to make a deposit

How much would you like to deposit?

Select card to deposit from:

▼

Or add a new card:

Name on Card:

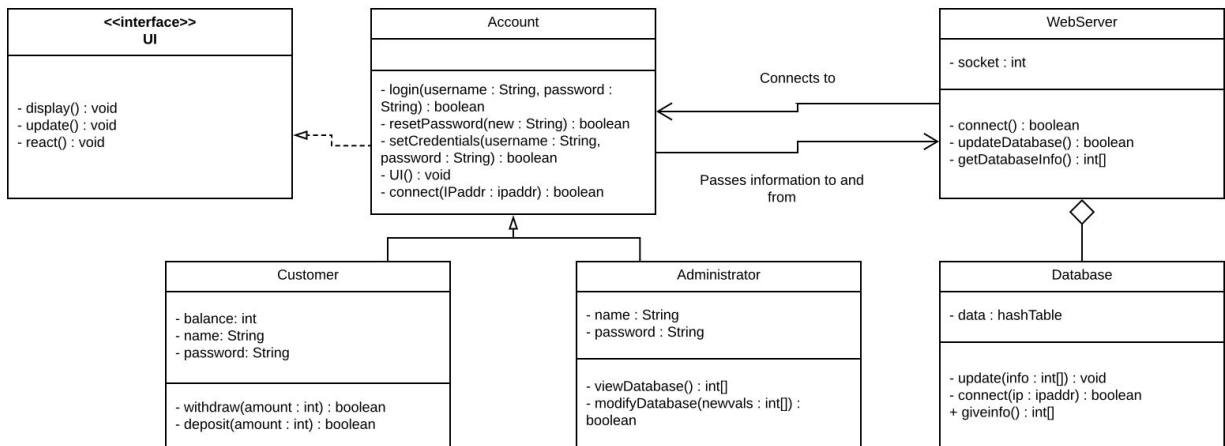
Card Number:

CSV Number:

Expiration Date:

**Data Storage:** For our data storage, we will be using a hash table to store all of our user information. We'll have user account #'s that are tied with their emails, login information, and account information such as a net balance in their account.

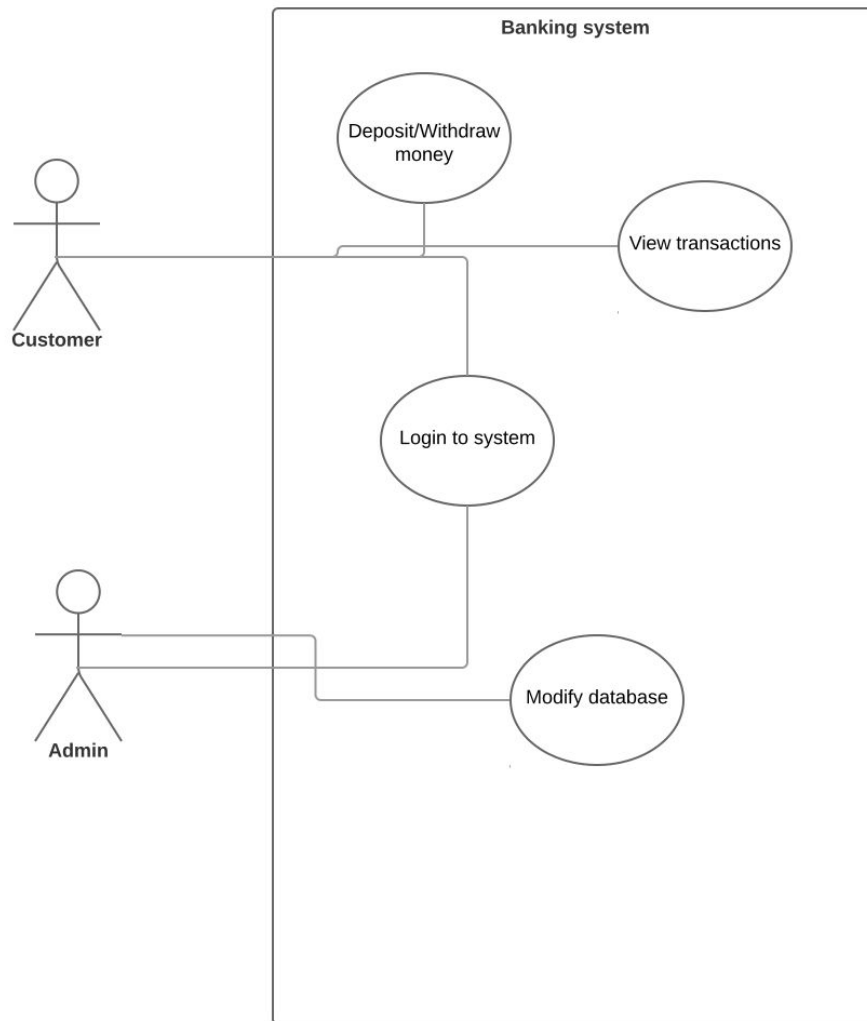
**Class Diagram:**



**Use Case Diagram:**

## USE CASE DIAGRAM

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### Use Case Document:

Use Case ID	25
Use Case Name	Withdrawing Money
Description	Customer withdraws money stored in service, gets error if no money to withdraw
Actors	Customer

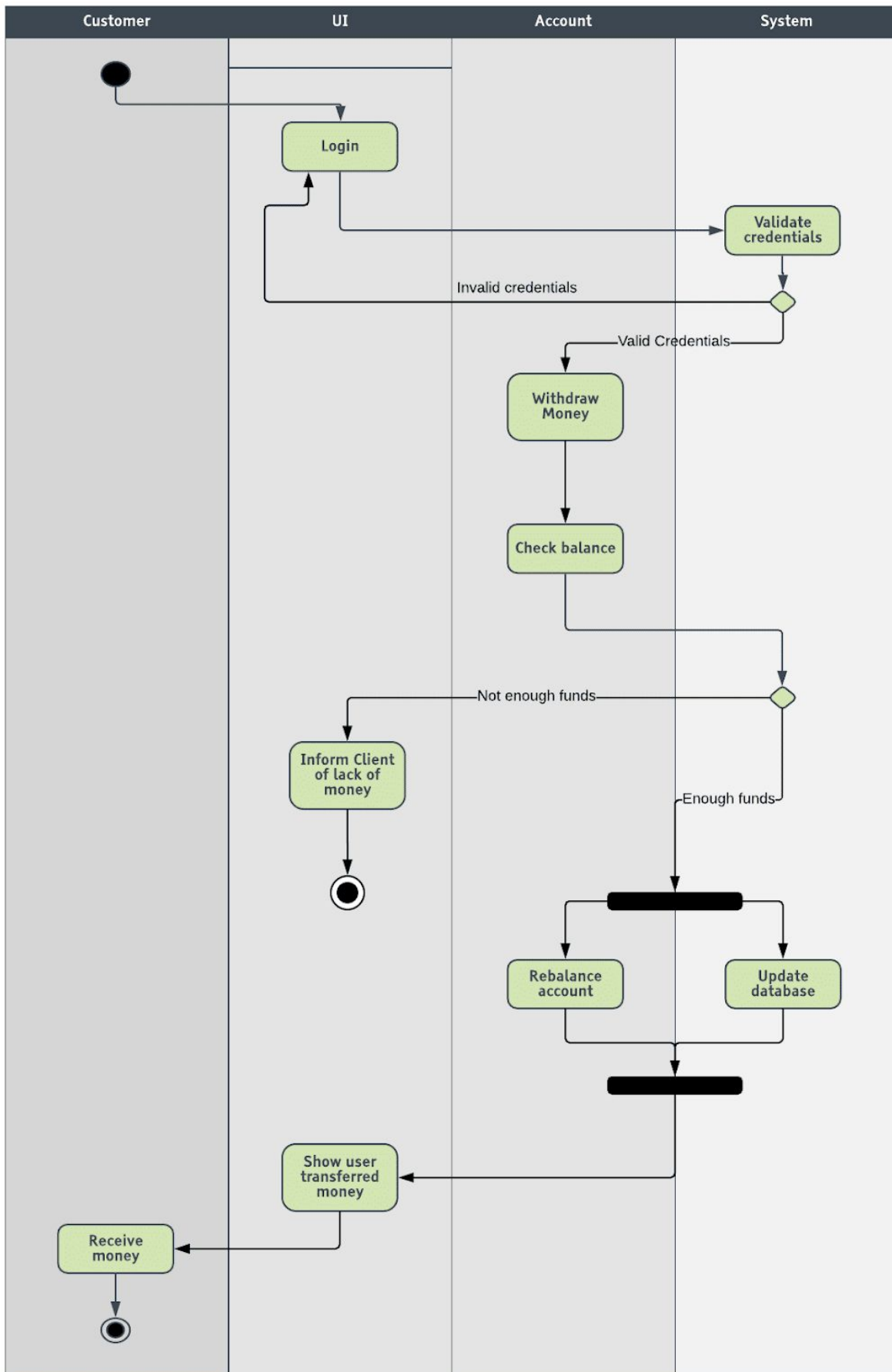
Preconditions	Database, server, account are set up and money has been deposited
Post conditions	Database balance updated, customer receives money
Frequency	Constant use by customers
Variations	
Exceptions	Error message: Not enough money to withdraw
Developer Notes	

Use Case ID	21
Use Case Name	System setup
Description	Admin sets up object and database instances, gets message indicating success or failure

Actors	Admin
Preconditions	Source code is properly downloaded
Post conditions	Database and server and object instances are running on machine
Frequency	Once per installation
Variations	Resetting instances if machine goes down
Exceptions	Error message: Setup failed
Developer Notes	

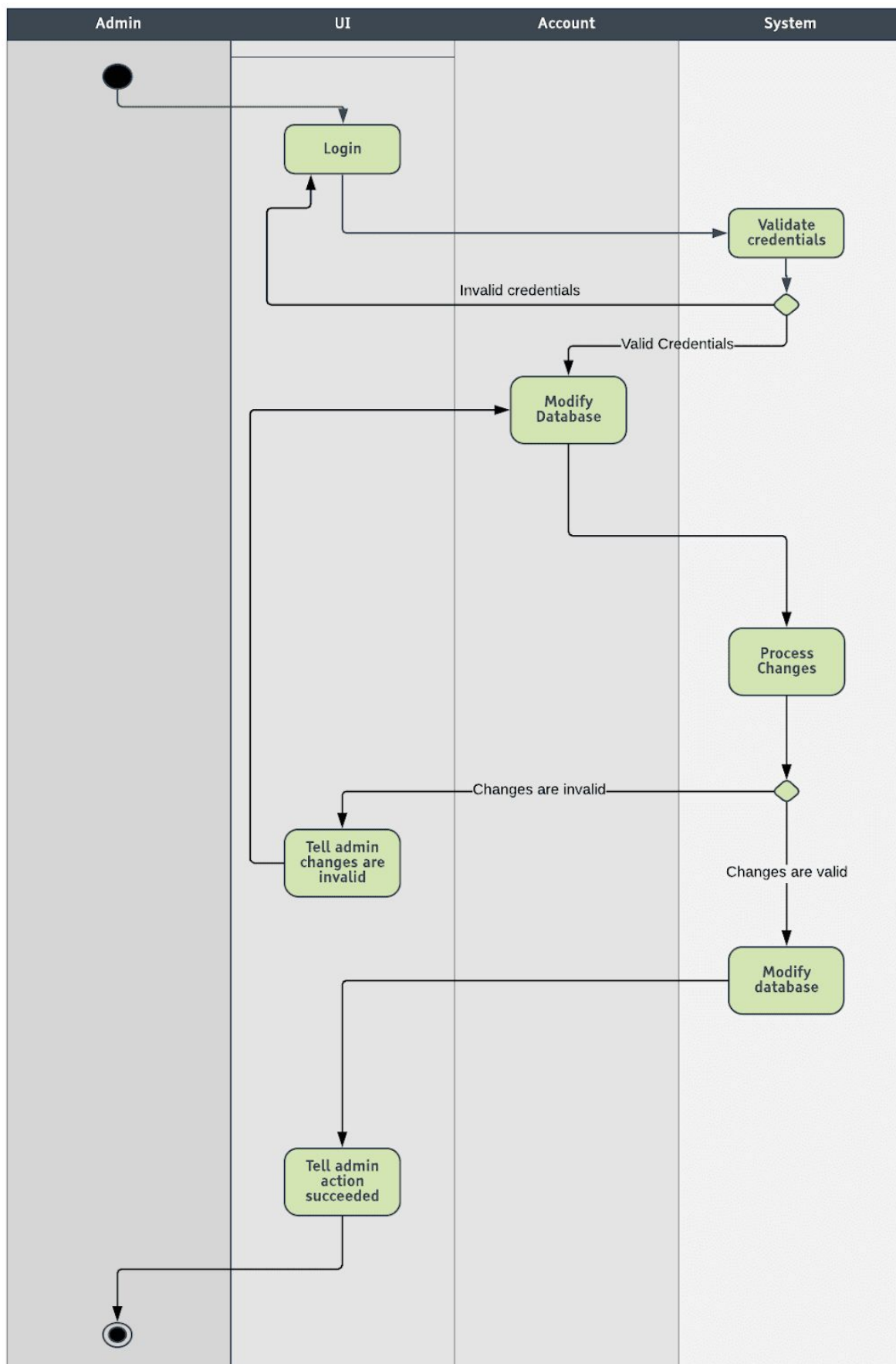
### Activity Diagrams:

Req ID 30 User ID 25



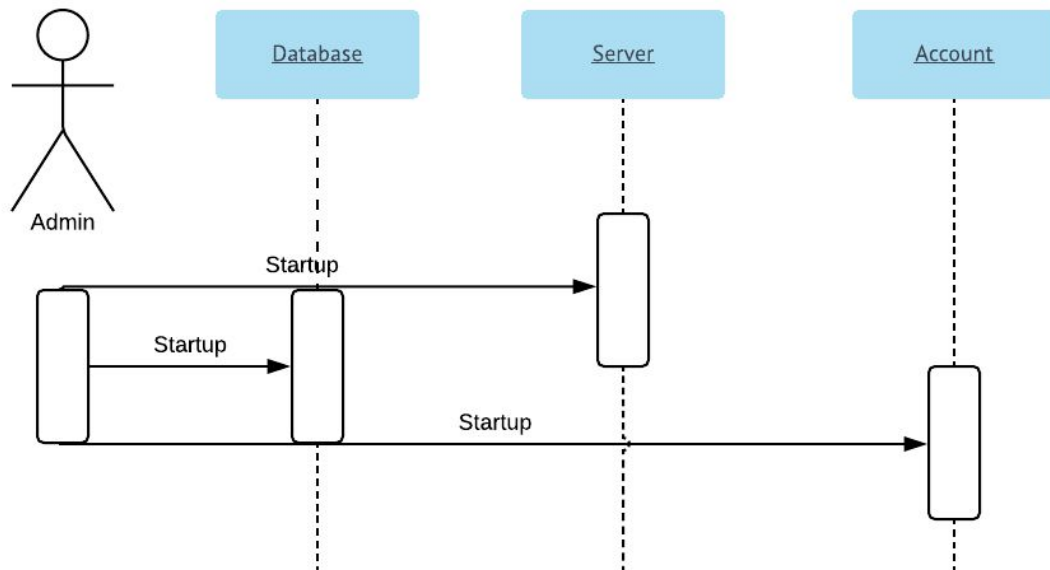






## Sequence Diagrams:

Req ID 34 Use case ID 21



Req ID 30 Use Case ID 25

