

CODESPACES

README.md - Javaprojectericmendoza

turbo-space-barnacle-97w4w5xggqrw2x667.github.dev

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🔍 Javaprojectericmendoza [Codespaces: turbo space barnacle]

👤

EXPLORER

OPEN EDITORS

JAVAPROJECTERICMENDOZA [CODESPACES: TURBO...]

src

main

java/com/example

CheckBalance.java

Main.java 6, R

Transactions.java

UserAuthentication.java 1

resources

db

dashboard.html

CashInTest.cs

CashTransferTest.cs

CheckBalanceTest.cs

MainTest.cs

TransactionsTest.cs

UserAuthenticationTest.cs

target

.gitignore

Gash online banking sample output.docx

GashApp.eml

GashApp.userlibraries

OUTLINE

TIMELINE

CS-SCRIPT - ACTIVE

JAVA PROJECTS

MAVEN

README.md M

README.md > # GCash Console Banking App > ## Technologies Used

1 # GCash Console Banking App

2

3 A simple Java console application that simulates basic banking operations such as registration, login, balance checking, cash-in, cash

4 transfer, and transaction history. The app uses SQLite as its database backend.

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27

PROBLEMS 7

OUTPUT

DEBUG CONSOLE

TERMINAL

PORTS 5

Filter

json-server

json-server is now active!

Codespaces: turbo space barnacle

master+ 🔍 🔄

0 7

5

Connect

JavaDebugX

Java: Ready

Start JSON Server

E MENDOZA (6 days ago)

Ln 17, Col 1

Spaces: 4

UTF-8

LF

Markdown

Go Live

Layout: US

The screenshot displays the Visual Studio Code (VS Code) interface with a Java project named "Javaprojectericmendoza". The Explorer sidebar on the left shows the project structure:

- lib
  - sqlite-jdbc-3.36.0.3.jar
- src
  - main
    - java/com/example
      - CashIn.java
      - CashTransfer.java
      - CheckBalance.java
      - Main.java (selected)
      - Transactions.java
      - UserAuthentication.java
- resources
  - db
  - dashboard.html

The main editor window shows the code for Main.java:

```
src > main > java > com > example > J Main.java > Java Language Support > Main > main  
1 package com.example;  
2  
3 import java.util.Scanner;  
4  
5 public class Main {  
6  
7     Run | Debug  
8     public static void main(String[] args) {  
9         // 1) Initialize the database and tables (users, balance, transaction).  
10        UserAuthentication.initializeDB();  
11  
12        // 2) Create a Scanner for user input  
13        Scanner scanner = new Scanner(System.in);  
14  
15        // 3) Instantiate service classes  
16        UserAuthentication auth = new UserAuthentication();  
17        CheckBalance checkBalance = new CheckBalance();  
18        CashIn cashIn = new CashIn();  
19        CashTransfer cashTransfer = new CashTransfer();  
20        Transactions transactions = new Transactions();  
21  
22        int userId = -1; // Will hold the logged-in user ID  
23    }
```

The bottom panel shows the TERMINAL output:

```
@EricRMendoza → /workspaces/Javaprojectericmendoza (master) $ /usr/bin/env /home/codespace/.vscode-remote/data/User/globalStorage/pleiades.java-extensi  
on-pack-jdk/java/8/bin/java -cp /tmp/cp_dh0g8tjtbrmr8bg2tlus0sg3f.jar com.example.Main  
  
=== Welcome to GCash App ===  
1. Register  
2. Login  
3. Exit  
Choose option:
```

The status bar at the bottom indicates the current state: Codespaces: turbo space barnacle, master+, 0 errors, 1 warning, 5 suggestions, Connect, JavaDebugX, Java: Ready, Start JSON Server, Ln 23, Col 50, Spaces: 4, UTF-8, LF, Java, Go Live, Layout: US.



```

src > main > java > com > example > J Main.java > Java Language Support > Main > main
5  public class Main {
7      public static void main(String[] args) {
43         Scanner scanner = new Scanner(System.in);
44
45         System.out.print(s:"Enter 4-digit PIN: ");
46         String pin = scanner.nextLine();
47
48         boolean registered = auth.register(name, email, number, pin);
49         if (registered) {
50             System.out.println(x:"> Registration succeeded! You can now login.");
51         } else {
52             System.out.println(x:"> Registration failed. Try again.");
53         }
54         break;
55
56         case 2:
57             // --- Login ---
58             System.out.print(s:"Enter Email or Number: ");
59             String loginKey = scanner.nextLine();
60
61             System.out.print(s:"Enter PIN: ");
62             String loginPin = scanner.nextLine();
63
64             boolean loggedIn = auth.login(loginKey, loginPin);
65             if (loggedIn) {
66                 userId = UserAuthentication.getCurrentUserId();
67                 System.out.println(x:"> Login successful. Your User ID is " + userId);
68             }
69             // 5) Inner loop: banking menu
70             boolean sessionActive = true;
71             while (sessionActive) {
72                 System.out.println(x:"\n--- Main Menu ---");

```

```

src > main > java > com > example > J Main.java > Java Language Support > Main > main
5  public class Main {
7      public static void main(String[] args) {
70         boolean sessionActive = true;
71         while (sessionActive) {
72             System.out.println(x:"\n--- Main Menu ---");
73             System.out.println(x:"1. Check Balance");
74             System.out.println(x:"2. Cash In");
75             System.out.println(x:"3. Cash Transfer");
76             System.out.println(x:"4. View My Transactions");
77             System.out.println(x:"5. Change PIN");
78             System.out.println(x:"6. Logout");
79             System.out.print(s:"Enter your choice: ");
80             int action = scanner.nextInt();
81             scanner.nextLine(); // consume newline
82
83             switch (action) {
84                 case 1:
85                     double balance = CheckBalance.checkBalance(userId);
86                     System.out.printf(format:"Current balance: ₱%.2f%n", balance);
87                     break;
88                 case 2:
89                     System.out.print(s:"Enter amount to cash in (PHP): ");
90                     double amountIn = scanner.nextDouble();
91                     scanner.nextLine();
92                     cashIn.cashIn(userId, amountIn);
93                     break;
94                 case 3:
95                     System.out.print(s:"Enter recipient User ID: ");
96                     int toUserId = scanner.nextInt();
97                     System.out.print(s:"Enter amount to transfer (PHP): ");

```



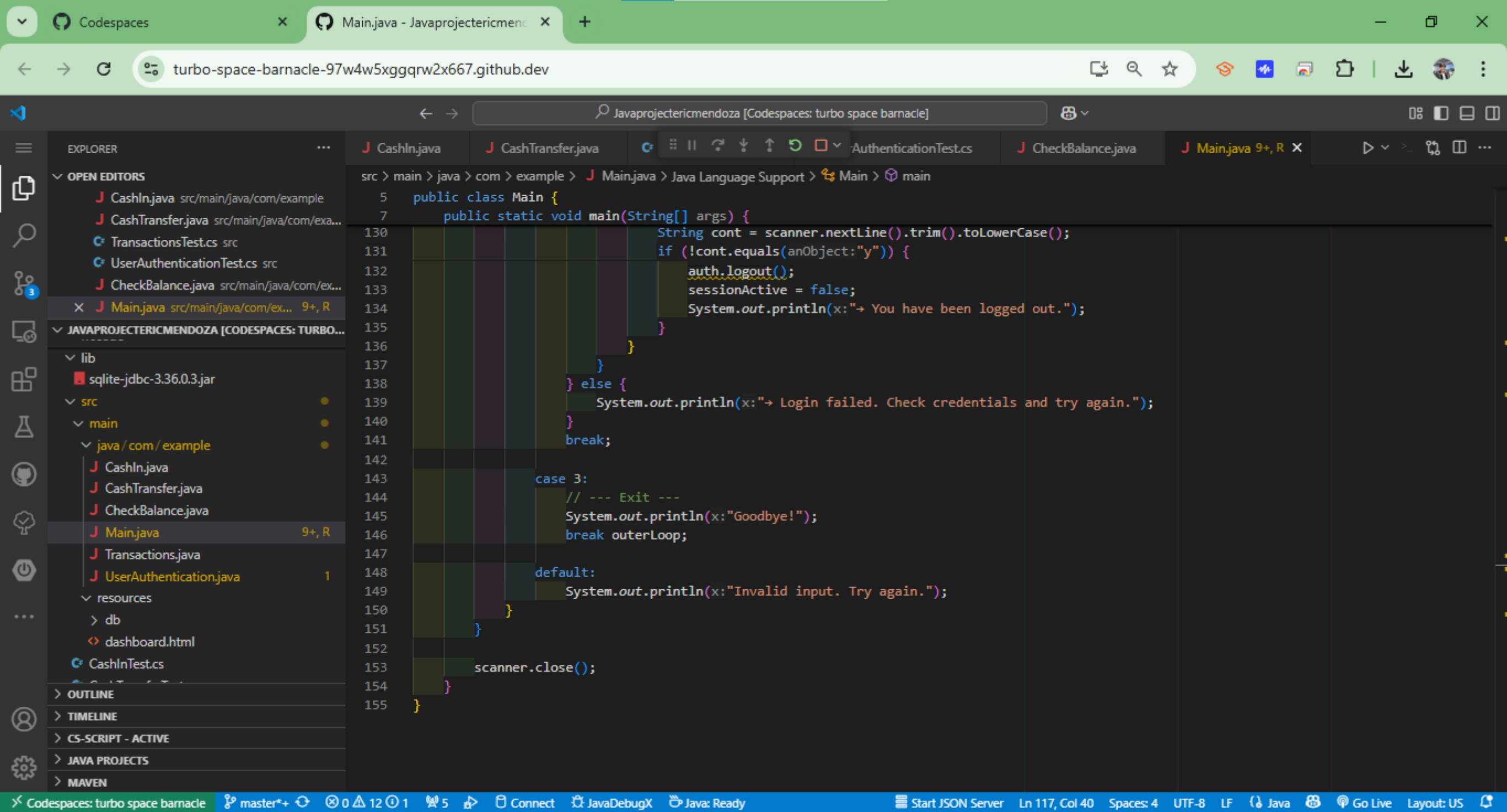
The screenshot shows an IDE with the following components:

- Explorer Panel:** Displays the project structure with folders like `lib`, `src`, and `resources`. The `src/main/java/com/example` directory is expanded, showing files like `CashIn.java`, `CashTransfer.java`, `CheckBalance.java`, `Main.java` (selected), `Transactions.java`, and `UserAuthentication.java`.
- Outline Panel:** Shows the project's outline with sections like `OUTLINE`, `TIMELINE`, `CS-SCRIPT - ACTIVE`, `JAVA PROJECTS`, and `MAVEN`.
- Main Editor:** Displays the `Main.java` file with the following code:
 

```

src > main > java > com > example > J Main.java > Java Language Support > Main > main
5  public class Main {
7      public static void main(String[] args) {
101         scanner.nextLine();
102         cashTransfer.cashTransfer(userId, toUserId, amountTransfer);
103         break;
104
105         case 4:
106             transactions.viewUserAll(userId);
107             break;
108
109         case 5:
110             System.out.print(s:"Enter current PIN: ");
111             String oldPin = scanner.nextLine();
112             System.out.print(s:"Enter new 4-digit PIN: ");
113             String newPin = scanner.nextLine();
114             auth.changePin(oldPin, newPin);
115             break;
116
117         case 6:
118             auth.logout();
119             sessionActive = false;
120             System.out.println(x:"→ You have been logged out.");
121             break;
122
123         default:
124             System.out.println(x:"Invalid choice. Try again.");
125
126
127         // Ask if the user wants another transaction
128         if (sessionActive) {
129             System.out.print(s:"\nDo you want to perform another transaction? (y/n): ");
130             String cont = scanner.nextLine().trim().toLowerCase();
131             if (!cont.equals("n")) {

```
- Run and Debug Panels:** Located at the bottom, showing the execution status and configuration.



CodeSpaces

Main.java - Javaprojectericmendo

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ClipboardDownloadSearchStar

Share

Download

Profile

More

Javaprojectericmendoza [Codespaces: turbo space barnacle]

13

OUTPUTDEBUG CONSOLETERMINAL

EXPLORER

OPEN EDITORS

CashIn.java src/main/java/com/example

CashTransfer.java src/main/java/com/exa...

TransactionsTest.cs src

UserAuthenticationTest.cs src

CheckBalance.java src/main/java/com/ex...

Main.java src/main/java/com/ex... 9+, R

JAVAPROJECTERICMENDOZA [CODESPACES: TURBO...]

lib

sqlite-jdbc-3.36.0.3.jar

src

main

java/com/example

CashIn.java

CashTransfer.java

CheckBalance.java

Main.java 9+, R

Transactions.java

UserAuthentication.java 1

resources

db

dashboard.html

CashInTest.cs

OUTLINE

TIMELINE

CS-SCRIPT - ACTIVE

JAVA PROJECTS

MAVEN

TERMINAL

@EricMendoza →/workspaces/Javaprojectericmendoza (master) \$ /usr/bin/env /home/codespace/.vscode-remote/data/User/globalStorage/pleiades.java-exten  
sion-pack-jdk/java/8/bin/java -cp /tmp/cp\_dh0g8tjtbrmr8bg2t1us0sg3f.jar com.example.Main

=== Welcome to GCash App ===  
1. Register  
2. Login  
3. Exit  
Choose option: 1  
Enter Name: Erica Mendoza  
Enter Email: ericamendoza@gmail.com  
Enter Contact Number (11 digits): 09981234567  
Enter 4-digit PIN: 1234  
Registration successful.  
→ Registration succeeded! You can now login.

=== Welcome to GCash App ===  
1. Register  
2. Login  
3. Exit  
Choose option: 2  
Enter Email or Number: 09981234567  
Enter PIN: 1234  
Login successful. User ID: 6  
→ Login successful. Your User ID is 6

--- Main Menu ---  
1. Check Balance  
2. Cash In  
3. Cash Transfer  
4. View My Transactions  
5. Change PIN  
6. Logout  
Enter your choice: 1  
Current balance: ₱0.00

JavaSE-21 LTS

Run: Main

CodeSpaces: turbo space barnacle

master\*+ ↺

0 12 1 5

Connect

JavaDebugX

Java: Ready

Start JSON Server

Ln 117, Col 40

Spaces: 4

UTF-8

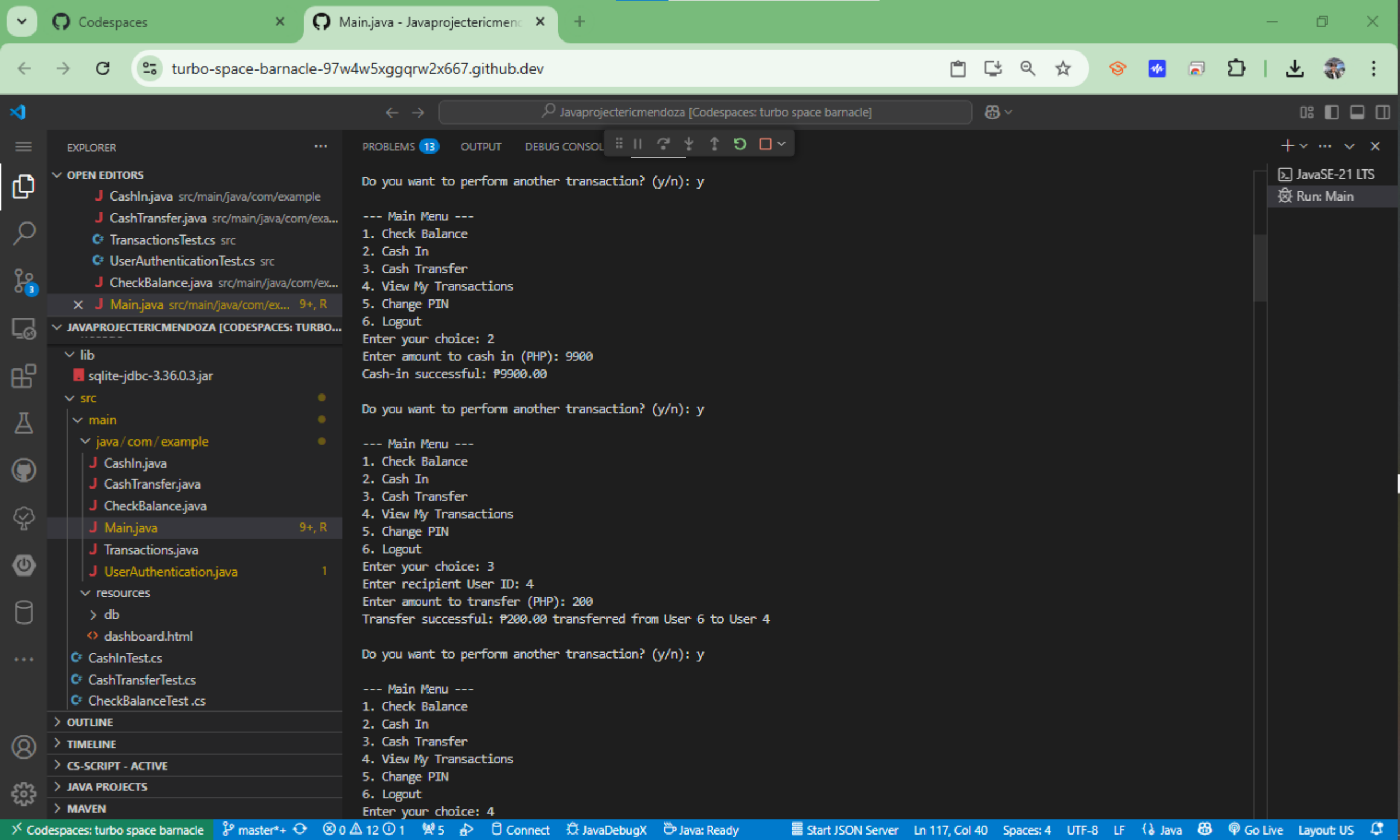
LF

Java

Go Live

Layout: UIS



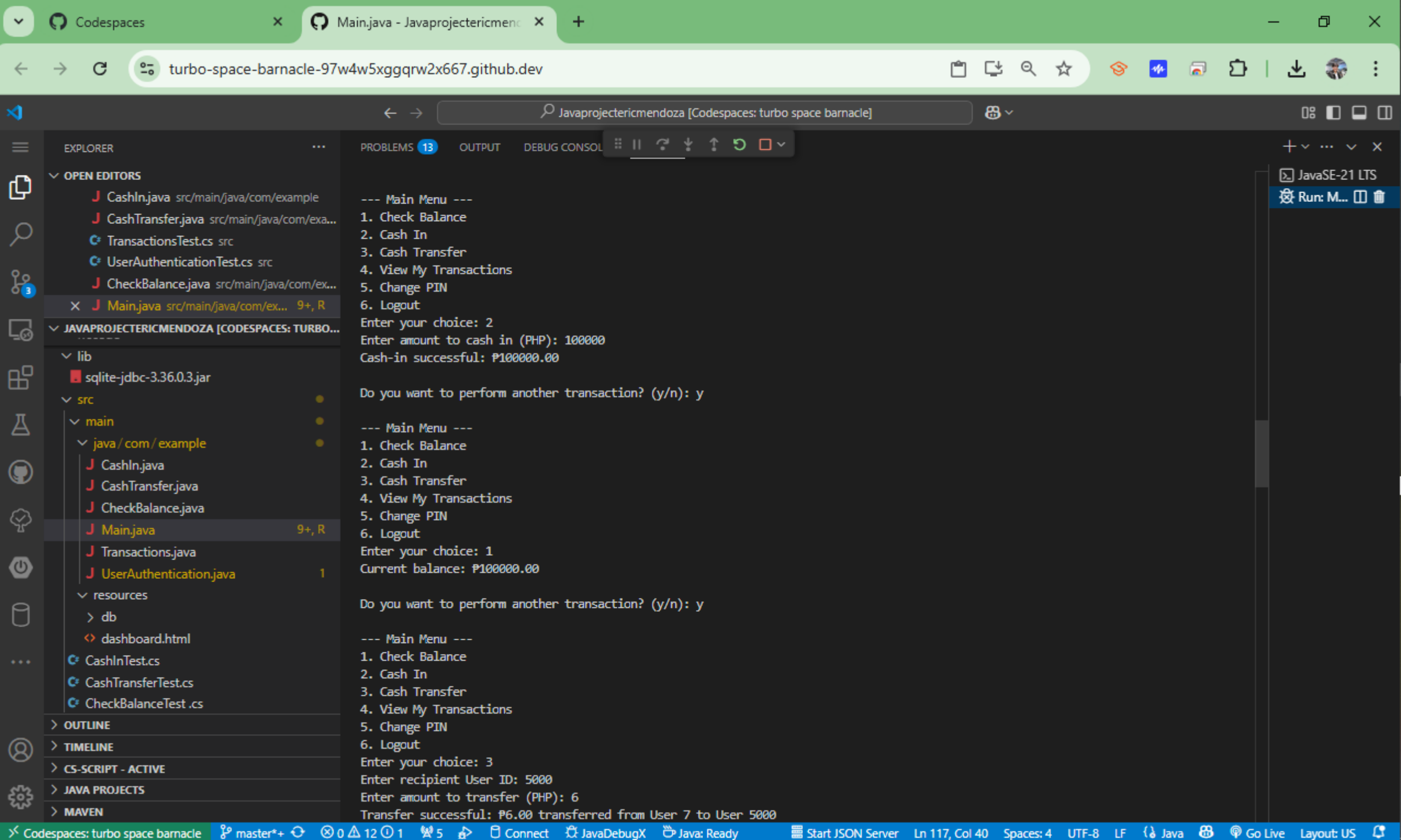


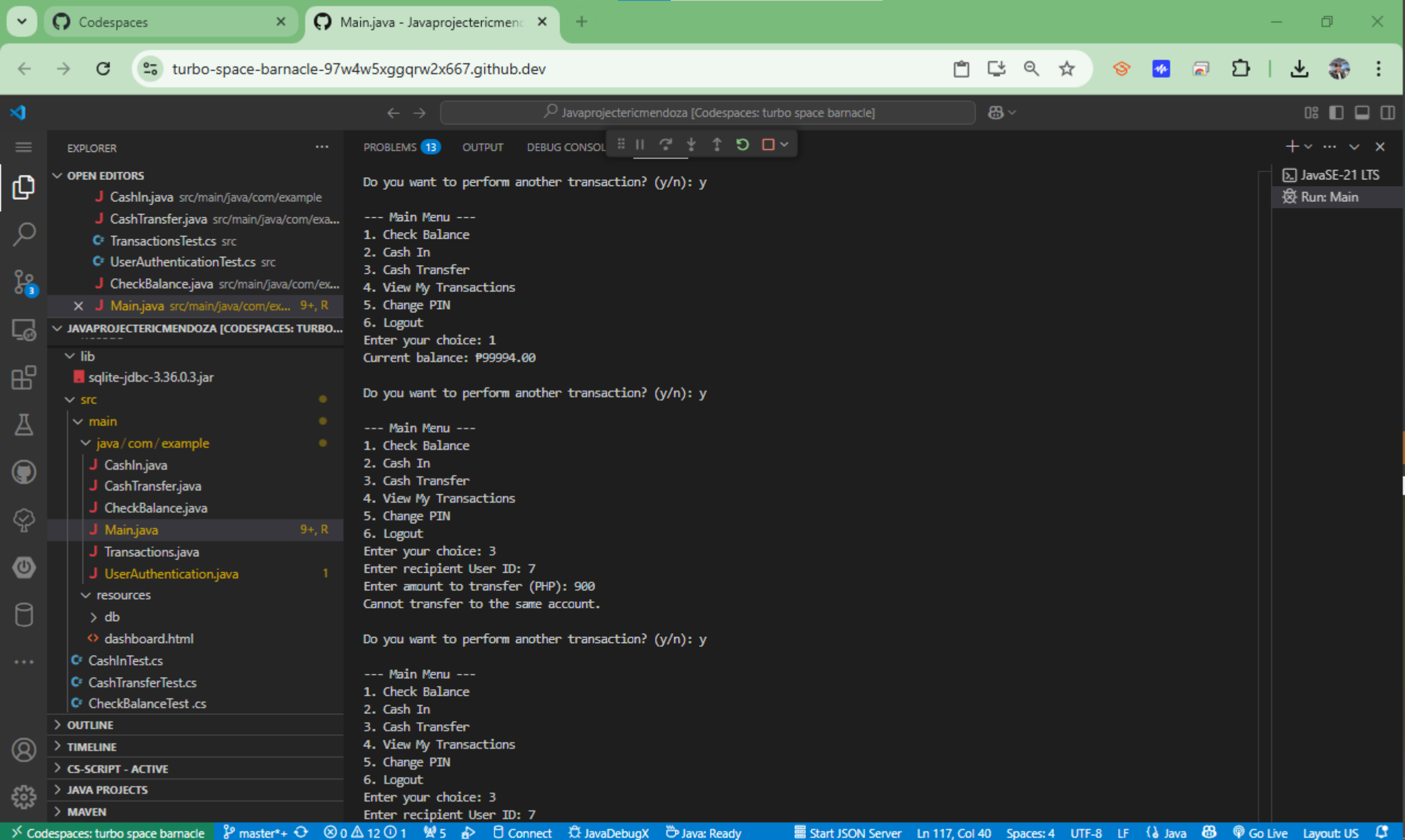
The screenshot displays an IDE interface with the following components:

- EXPLORER:** Shows the project structure for `JAVAPROJECTERICMENDOZA [CODESPACES: TURBO...]`. It includes a `lib` folder with `sqlite-jdbc-3.36.0.3.jar`, a `src` folder with a `main` package containing `java/com/example`. This package contains `CashIn.java`, `CashTransfer.java`, `CheckBalance.java`, `Main.java` (highlighted), `Transactions.java`, and `UserAuthentication.java`. There is also a `resources` folder with a `db` subfolder containing `dashboard.html`. Additionally, there are test files: `CashInTest.cs`, `CashTransferTest.cs`, and `CheckBalanceTest.cs`.
- PROBLEMS:** Shows 13 problems.
- OUTPUT:** Displays the console output of the application. It shows a sequence of transactions for User ID 6, including a login, a cash transfer, and a logout. It also shows the main menu options: 1. Check Balance, 2. Cash In, 3. Cash Transfer, 4. View My Transactions, 5. Change PIN, 6. Logout. The output indicates that the user has been logged out successfully.
- DEBUG CONSOLE:** Shows the current state of the application, including the main menu and the list of transactions for User ID 6.
- Run:** Shows the application is running on JavaSE-21 LTS.

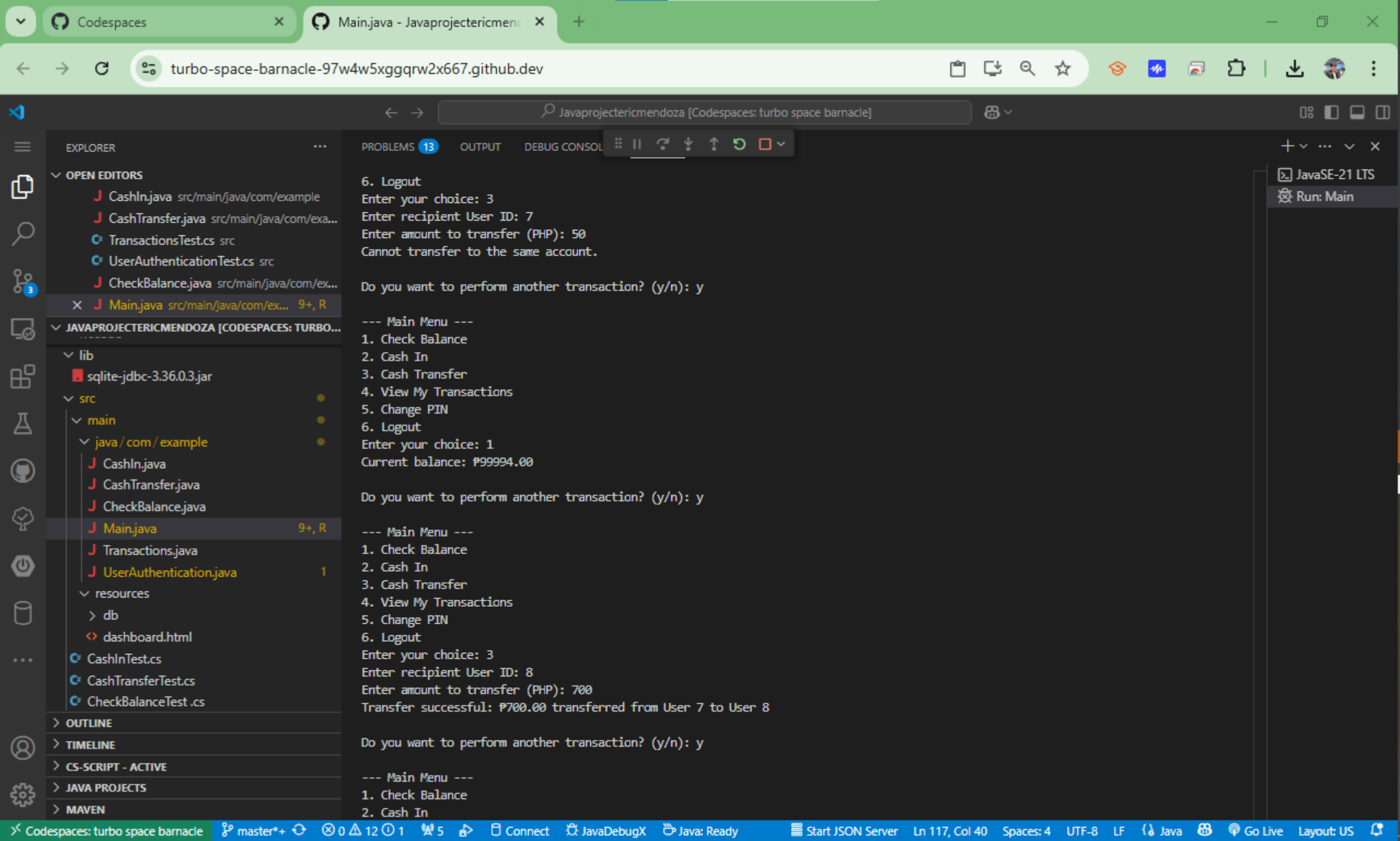
The screenshot displays an IDE interface with the following components:

- Explorer View (Left):** Shows the project structure for 'JAVAPROJECTERICMENDOZA'. The 'src/main/java/com/example' directory contains several Java files, including 'Main.java' which is currently selected. Other files include 'CashIn.java', 'CashTransfer.java', 'CheckBalance.java', 'Transactions.java', and 'UserAuthentication.java'. There are also test files like 'CashInTest.cs', 'CashTransferTest.cs', and 'CheckBalanceTest.cs'.
- Problems View (Top Right):** Displays two error messages. The first error states: 'Welcome to GCash App' (1) 'Enter Email or Number: anaricamaemendoza@gmail.com' (1) 'Enter Email' (1) 'The output does not match the expected output.' The second error is similar but with different input values.
- Run and Debug Console (Bottom Right):** Shows the execution output of the application. It starts with '=== Welcome to GCash App ===', followed by a menu with options 1. Register, 2. Login, and 3. Exit. The user chooses option 1 (Register), enters a name, email, contact number, and PIN, and successfully registers. Then, the user chooses option 2 (Login), enters an email or number and a PIN, and successfully logs in. The console also shows the 'Main Menu' with options 1. Check Balance, 2. Cash In, 3. Cash Transfer, 4. View My Transactions, 5. Change PIN, and 6. Logout. The user chooses option 1 (Check Balance), and the current balance is displayed as '₱0.00'. The application then asks 'Do you want to perform another transaction? (y/n): y'.









The screenshot displays an IDE interface with a dark theme. On the left, the 'EXPLORER' sidebar shows a project named 'JAVAPROJECTERICMENDOZA [CODESPACES: TURBO...]'. The project structure includes a 'lib' folder with 'sqlite-jdbc-3.36.0.3.jar', a 'src' folder containing 'main' (which has 'java/com/example' with files 'CashIn.java', 'CashTransfer.java', 'CheckBalance.java', and 'Main.java' (9+, R)), 'resources' (with 'db' and 'dashboard.html'), and test files 'CashInTest.cs', 'CashTransferTest.cs', and 'CheckBalanceTest.cs'. Below the explorer are tabs for 'OUTLINE', 'TIMELINE', 'CS-SCRIPT - ACTIVE', 'JAVA PROJECTS', and 'MAVEN'. The main editor area shows the content of 'Main.java', which is a PHP script for a banking system. The terminal window at the bottom shows the execution of the script, including prompts for transaction amounts, PINs, and a list of transactions for a specific user.

```
Enter amount to transfer (PHP): 700
Transfer successful: ₱700.00 transferred from User 7 to User 8

Do you want to perform another transaction? (y/n): y

--- Main Menu ---
1. Check Balance
2. Cash In
3. Cash Transfer
4. View My Transactions
5. Change PIN
6. Logout
Enter your choice: 4
=== Transactions for User ID: 7 ===
ID:11 | Transfer | ₱700.00 | acct:7 | from:7 | to:8 | 2025-06-06 09:41:09
ID:10 | Transfer | ₱6.00 | acct:7 | from:7 | to:5000 | 2025-06-06 09:39:28
ID:9 | CashIn | ₱100000.00 | acct:7 | from:0 | to:0 | 2025-06-06 09:38:38

Do you want to perform another transaction? (y/n): y

--- Main Menu ---
1. Check Balance
2. Cash In
3. Cash Transfer
4. View My Transactions
5. Change PIN
6. Logout
Enter your choice: 5
Enter current PIN: 2345
Enter new 4-digit PIN: 1234
PIN changed successfully.

Do you want to perform another transaction? (y/n): y

--- Main Menu ---
1. Check Balance
2. Cash In
3. Cash Transfer
4. View My Transactions
5. Change PIN
6. Logout
```

CodeSpaces

Main.java - Javaprojectericmendo

turbo-space-barnacle-97w4w5xggqrw2x667.github.dev

JavaSE-21 LTS

Run: M...

Javaprojectericmendoza [Codespaces: turbo space barnacle]

13

OUTPUT

DEBUG CONSOLE

EXPLOER

OPEN EDITORS

CashIn.java src/main/java/com/example

CashTransfer.java src/main/java/com/exa...

TransactionsTest.cs src

UserAuthenticationTest.cs src

CheckBalance.java src/main/java/com/ex...

Main.java src/main/java/com/ex... 9+, R

JAVAPROJECTERICMENDOZA [CODESPACES: TURBO...]

lib

sqlite-jdbc-3.36.0.3.jar

src

main

java / com / example

CashIn.java

CashTransfer.java

CheckBalance.java

Main.java 9+, R

Transactions.java

UserAuthentication.java 1

resources

db

dashboard.html

CashInTest.cs

CashTransferTest.cs

CheckBalanceTest .cs

OUTLINE

TIMELINE

CS-SCRIPT - ACTIVE

JAVA PROJECTS

MAVEN

--- Main Menu ---

1. Check Balance

2. Cash In

3. Cash Transfer

4. View My Transactions

5. Change PIN

6. Logout

Enter your choice: 6

User logged out.

→ You have been logged out.

=== Welcome to GCash App ===

1. Register

2. Login

3. Exit

Choose option: 2

Enter Email or Number: ericamendoza@gmail.com

Enter PIN: 4321

Login successful. User ID: 6

→ Login successful. Your User ID is 6

--- Main Menu ---

1. Check Balance

2. Cash In

3. Cash Transfer

4. View My Transactions

5. Change PIN

6. Logout

Enter your choice: 1

Current balance: ₱9700.00

Do you want to perform another transaction? (y/n): y

--- Main Menu ---

1. Check Balance

2. Cash In

Codespaces: turbo space barnacle

master+ ↻

0 12 0 1

5

Connect

JavaDebugX

Java: Ready

Start JSON Server

Ln 117, Col 40

Spaces: 4

UTF-8

LF

Java

Go Live

Layout: US

The screenshot displays an IDE interface with a dark theme. On the left, the Explorer panel shows a project structure for 'JAVAPROJECTERICMENDOZA'. The 'src' directory contains a 'main' package, which in turn contains a 'java/com/example' package. This package includes several Java files: 'CashIn.java', 'CashTransfer.java', 'CheckBalance.java', 'Main.java' (highlighted), 'Transactions.java', and 'UserAuthentication.java'. Below the source files, there are test files in the 'resources' directory: 'CashInTest.cs', 'CashTransferTest.cs', and 'CheckBalanceTest.cs'. The right side of the IDE shows the Terminal panel, which contains the output of a Java application. The application prompts the user to perform a transaction, lists six options (Check Balance, Cash In, Cash Transfer, View My Transactions, Change PIN, Logout), and then displays a table of transactions for User ID 6. The transactions table has columns for ID, type, amount, account, from, to, and timestamp. The output shows three transactions: a transfer of ₱1000.00, a cash in of ₱80000.00, and a transfer of ₱200.00. The application then prompts the user to perform another transaction, and the user enters 'y'.

```
Do you want to perform another transaction? (y/n): y

--- Main Menu ---
1. Check Balance
2. Cash In
3. Cash Transfer
4. View My Transactions
5. Change PIN
6. Logout
Enter your choice: 4
=== Transactions for User ID: 6 ===
ID:13 | Transfer | ₱1000.00 | acct:6 | from:6 | to:8 | 2025-06-06 09:44:12
ID:12 | CashIn | ₱80000.00 | acct:6 | from:0 | to:0 | 2025-06-06 09:43:48
ID:8 | Transfer | ₱200.00 | acct:6 | from:6 | to:4 | 2025-06-06 09:35:57
ID:7 | CashIn | ₱9900.00 | acct:6 | from:0 | to:0 | 2025-06-06 09:35:08

Do you want to perform another transaction? (y/n): y

--- Main Menu ---
1. Check Balance
2. Cash In
3. Cash Transfer
4. View My Transactions
5. Change PIN
6. Logout
Enter your choice: 6
User logged out.
→ You have been logged out.

=== Welcome to GCash App ===
1. Register
2. Login
3. Exit
Choose option: 3
Goodbye!
@EricRMendoza →/workspaces/Javaprojectericmendoza (master) $
```