

EduBridge



A Project

Report On

ATM Interface

By

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Batch: 2022 – 7905

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EduBridge

Introduction:

An Automated Teller Machine (ATM) Interface System allows customer to perform banking transaction anywhere at anytime without the need of human teller. By using ATM card at an ATM, individuals can withdraw cash from saving accounts. To make a deposit or transfer money from one account to another and perform other functions also.

Modules:-

- User Module

I have developed this Application in **Java and MySQL**. This project is a console based application.

The main objective of the ATM Interface System is to reduce manual work and time. It is difficult and time-consuming to transect our money from each branch bank account. To avoid this problem, we use ATM Machine . In our user module first the user will insert the ATM card in the ATM machine. Then the ATM will ask for Personal Identification Number(PIN).

If the number is entered incorrectly most ATMs will retain the card for security precaution. Once the correct pin is given the ATM ask some perfume about account.

If you want to know the account balance you perform the balance check task, it will give the current balance.

If you want to withdraw amount, you can move that option. After then the ATM will ask for the amount of money to be withdrawn. If account haven't contain that much of money, the insufficient balance message will display.

If you want to deposit some money, you can choose deposit option. ATM ask some amount of money with deposit process, after the completion that amount will add in your account. You can perform more options and access some bank details as per ATM machine versions.

Software Requirements:

Back end: MySQL workbench 8.0 CE, JAVA jdk version 19

Text Editor: Eclipse IDE for Java Developers

Browser: Best result on Google Chrome

Operating System: Windows 10

Data Dictionary:

Create Database ATM Users:

```
MySQL 8.0 Command Line Client - Unicode
Enter password: ****
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 374
Server version: 8.0.31 MySQL Community Server - GPL

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> select * from atmdatabase.atmuser;
+-----+-----+-----+-----+-----+-----+
| AtmId | AtmUserName | AtmUserMbNum | AtmPin | AccBal | BankName |
+-----+-----+-----+-----+-----+-----+
| 1234  | Arjun       | 1111122222  | 1111   | 1000   | ABC Bank |
| 5051  | Karan       | 5555511111  | 5555   | 5000   | TPT Bank |
| 5432  | Tharun     | 5555544444  | 5454   | 4000   | XYZ Bank |
| 5678  | Anjali     | 5555566666  | 5555   | 2000   | ECR Bank |
| 9876  | Manish     | 9999988888  | 9999   | 3000   | ADK Bank |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> _
```

After Withdraw Database:

```
mysql> select * from atmdatabase.atmuser;
+-----+-----+-----+-----+-----+-----+
| AtmId | AtmUserName | AtmUserMbNum | AtmPin | AccBal | BankName |
+-----+-----+-----+-----+-----+-----+
| 1234  | Arjun       | 1111122222  | 1111   | 900    | ABC Bank |
| 5051  | Karan       | 5555511111  | 5555   | 5000   | TPT Bank |
| 5432  | Tharun     | 5555544444  | 5454   | 4000   | XYZ Bank |
| 5678  | Anjali     | 5555566666  | 5555   | 2000   | ECR Bank |
| 9876  | Manish     | 9999988888  | 9999   | 3000   | ADK Bank |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> _
```

After Deposit Database:

```
mysql> select * from atmdatabase.atmuser;
+-----+-----+-----+-----+-----+-----+
| AtmId | AtmUserName | AtmUserMbNum | AtmPin | AccBal | BankName |
+-----+-----+-----+-----+-----+-----+
| 1234  | Arjun       | 1111122222  | 1111   | 1122   | ABC Bank |
| 5051  | Karan       | 5555511111  | 5555   | 5000   | TPT Bank |
| 5432  | Tharun     | 5555544444  | 5454   | 4000   | XYZ Bank |
| 5678  | Anjali     | 5555566666  | 5555   | 2000   | ECR Bank |
| 9876  | Manish     | 9999988888  | 9999   | 3000   | ADK Bank |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

ATM process Database:

MySQL 8.0 Command Line Client - Unicode

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Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

```
mysql> select * from atmdatabase.atmuser;
```

AtmId	AtmUserName	AtmUserMbNum	AtmPin	AccBal	BankName
1234	Arjun	1111122222	1111	1000	ABC Bank
5051	Karan	5555111111	5555	5000	TPT Bank
5432	Tharun	5555444444	5454	4000	XYZ Bank
5678	Anjali	5555666666	5555	2000	ECR Bank
9876	Manish	9999888888	9999	3000	ADK Bank

5 rows in set (0.00 sec)

```
mysql> select * from atmdatabase.atmuser;
```

AtmId	AtmUserName	AtmUserMbNum	AtmPin	AccBal	BankName
1234	Arjun	1111122222	1111	900	ABC Bank
5051	Karan	5555111111	5555	5000	TPT Bank
5432	Tharun	5555444444	5454	4000	XYZ Bank
5678	Anjali	5555666666	5555	2000	ECR Bank
9876	Manish	9999888888	9999	3000	ADK Bank

5 rows in set (0.00 sec)

```
mysql> select * from atmdatabase.atmuser;
```

AtmId	AtmUserName	AtmUserMbNum	AtmPin	AccBal	BankName
1234	Arjun	1111122222	1111	1122	ABC Bank
5051	Karan	5555111111	5555	5000	TPT Bank
5432	Tharun	5555444444	5454	4000	XYZ Bank
5678	Anjali	5555666666	5555	2000	ECR Bank
9876	Manish	9999888888	9999	3000	ADK Bank

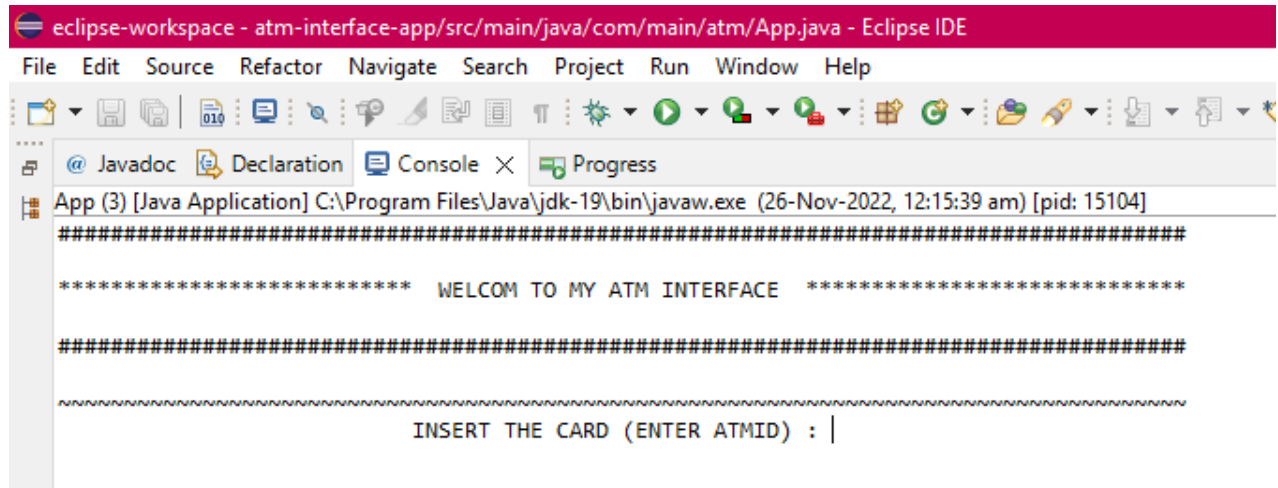
5 rows in set (0.00 sec)

```
mysql>
```



Console Screenshots:-

Interface without input:

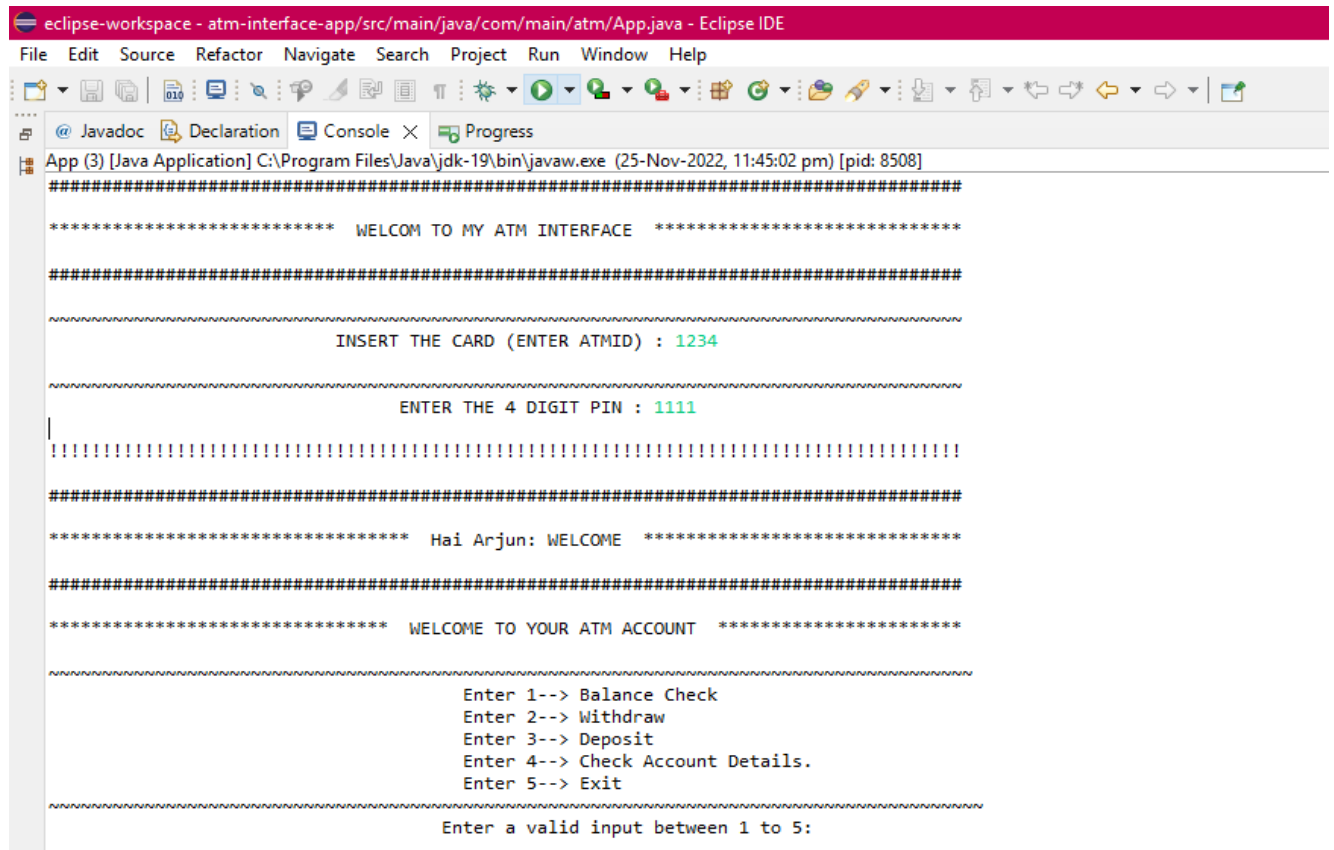


The screenshot shows the Eclipse IDE interface with the console window open. The title bar reads "eclipse-workspace - atm-interface-app/src/main/java/com/main/atm/App.java - Eclipse IDE". The menu bar includes File, Edit, Source, Refactor, Navigate, Search, Project, Run, Window, and Help. The toolbar contains various icons for file operations and development tools. The console window shows the output of the Java application, which is a simple text-based ATM interface. The output starts with a welcome message, followed by a prompt to insert the card and enter the ATMID.

```
eclipse-workspace - atm-interface-app/src/main/java/com/main/atm/App.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help

@ Javadoc Declaration Console X Progress
App (3) [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (26-Nov-2022, 12:15:39 am) [pid: 15104]
#####
***** WELCOM TO MY ATM INTERFACE *****
#####
~~~~~
INSERT THE CARD (ENTER ATMID) : |
```

Display after enter PIN:

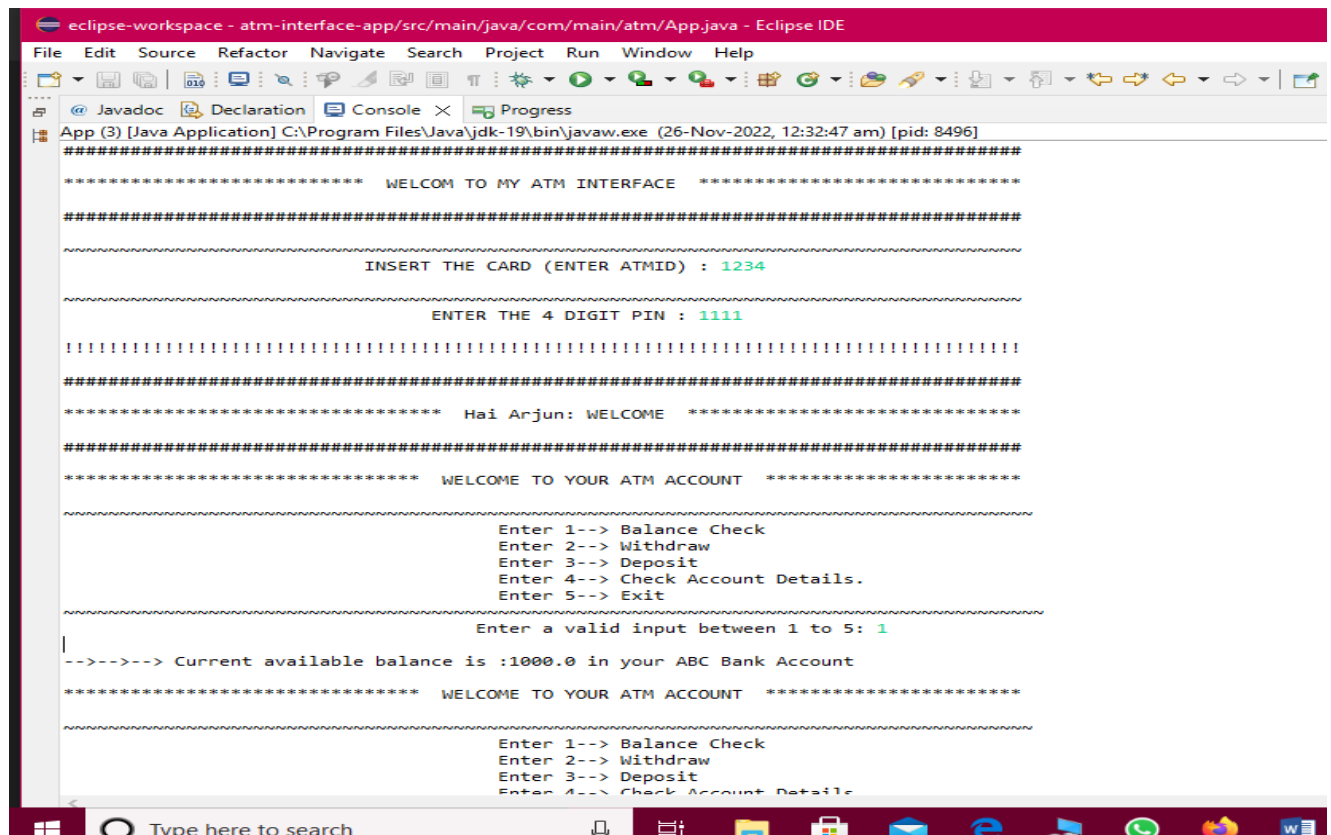


The screenshot shows the Eclipse IDE interface with the console window open. The title bar reads "eclipse-workspace - atm-interface-app/src/main/java/com/main/atm/App.java - Eclipse IDE". The menu bar includes File, Edit, Source, Refactor, Navigate, Search, Project, Run, Window, and Help. The toolbar contains various icons for file operations and development tools. The console window shows the output of the Java application, which is a simple text-based ATM interface. The output starts with a welcome message, followed by a prompt to insert the card and enter the ATMID. After entering the PIN, the application displays a message "Hai Arjun: WELCOME" and then a menu of options for the user to choose from.

```
eclipse-workspace - atm-interface-app/src/main/java/com/main/atm/App.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help

@ Javadoc Declaration Console X Progress
App (3) [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (25-Nov-2022, 11:45:02 pm) [pid: 8508]
#####
***** WELCOM TO MY ATM INTERFACE *****
#####
~~~~~
INSERT THE CARD (ENTER ATMID) : 1234
~~~~~
ENTER THE 4 DIGIT PIN : 1111
|
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
#####
***** Hai Arjun: WELCOME *****
#####
***** WELCOME TO YOUR ATM ACCOUNT *****
~~~~~
Enter 1--> Balance Check
Enter 2--> Withdraw
Enter 3--> Deposit
Enter 4--> Check Account Details.
Enter 5--> Exit
~~~~~
Enter a valid input between 1 to 5:
```

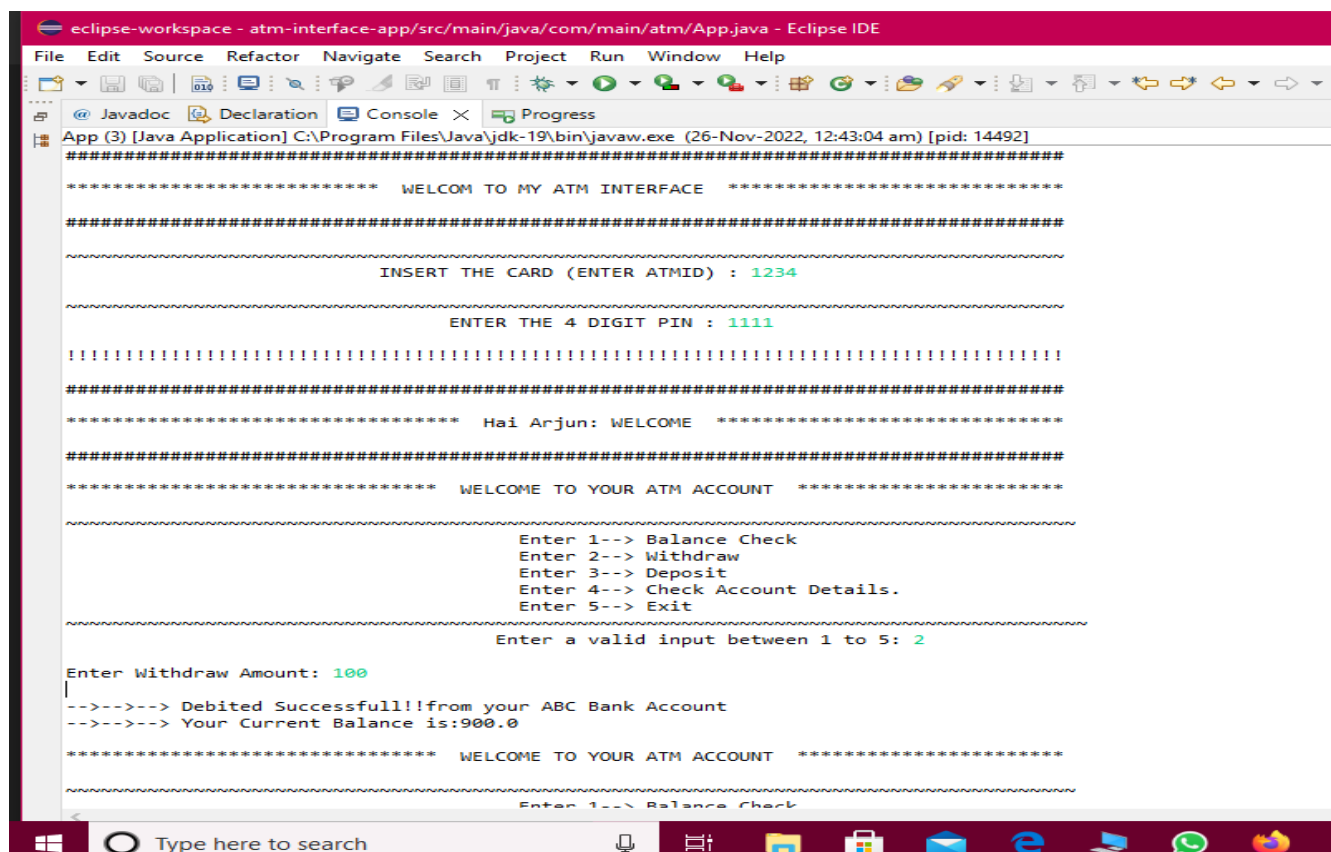
Balance Checking:



The screenshot shows the Eclipse IDE with the console window open. The application is running and displaying the following output:

```
eclipse-workspace - atm-interface-app/src/main/java/com/main/atm/App.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
@ Javadoc Declaration Console X Progress
App (3) [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (26-Nov-2022, 12:32:47 am) [pid: 8496]
*****
***** WELCOM TO MY ATM INTERFACE *****
*****
*****
***** INSERT THE CARD (ENTER AT MID) : 1234 *****
*****
***** ENTER THE 4 DIGIT PIN : 1111 *****
*****
*****
***** Hai Arjun: WELCOME *****
*****
***** WELCOME TO YOUR ATM ACCOUNT *****
*****
*****
***** Enter 1--> Balance Check
***** Enter 2--> Withdraw
***** Enter 3--> Deposit
***** Enter 4--> Check Account Details.
***** Enter 5--> Exit
*****
***** Enter a valid input between 1 to 5: 1 *****
|
-->-->--> Current available balance is :1000.0 in your ABC Bank Account
*****
***** WELCOME TO YOUR ATM ACCOUNT *****
*****
*****
***** Enter 1--> Balance Check
***** Enter 2--> Withdraw
***** Enter 3--> Deposit
***** Enter 4--> Check Account Details.
***** Enter 5--> Exit
*****
```

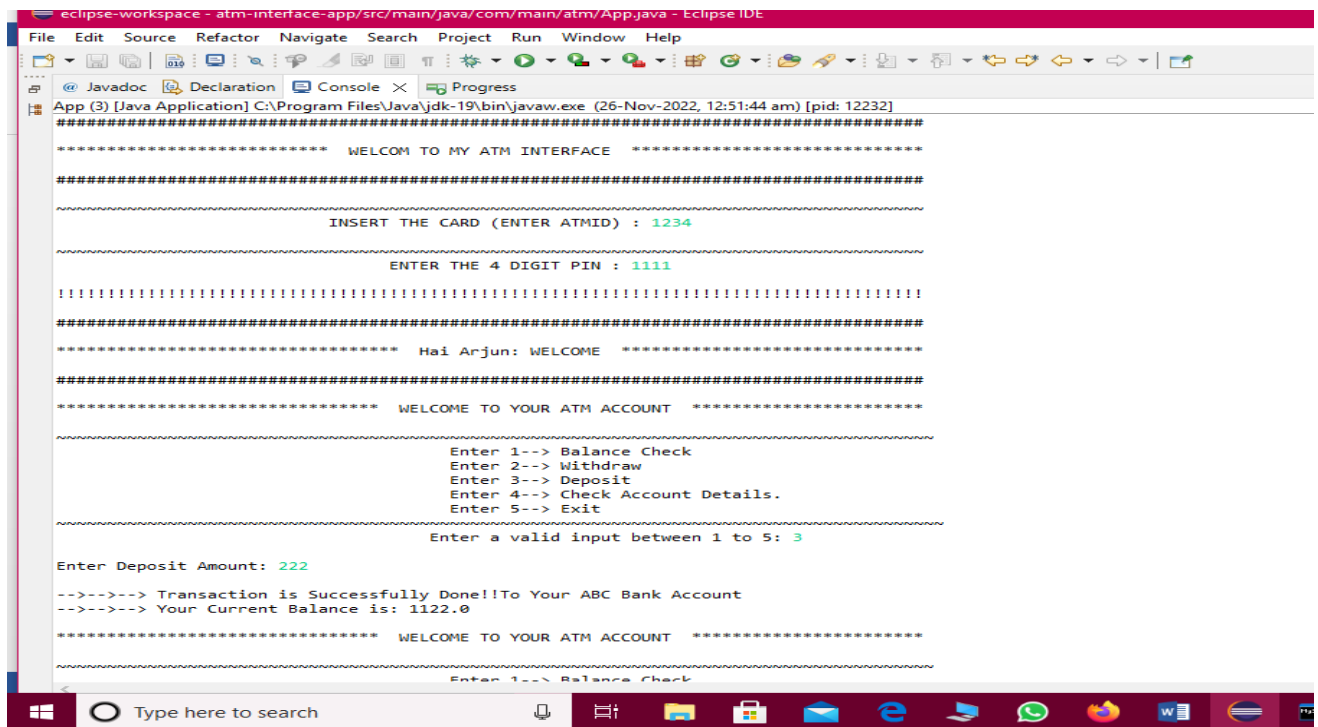
Withdraw process:



The screenshot shows the Eclipse IDE with the console window open. The application is running and displaying the following output:

```
eclipse-workspace - atm-interface-app/src/main/java/com/main/atm/App.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
@ Javadoc Declaration Console X Progress
App (3) [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (26-Nov-2022, 12:43:04 am) [pid: 14492]
*****
***** WELCOM TO MY ATM INTERFACE *****
*****
*****
***** INSERT THE CARD (ENTER AT MID) : 1234 *****
*****
***** ENTER THE 4 DIGIT PIN : 1111 *****
*****
*****
***** Hai Arjun: WELCOME *****
*****
***** WELCOME TO YOUR ATM ACCOUNT *****
*****
*****
***** Enter 1--> Balance Check
***** Enter 2--> Withdraw
***** Enter 3--> Deposit
***** Enter 4--> Check Account Details.
***** Enter 5--> Exit
*****
***** Enter a valid input between 1 to 5: 2 *****
|
Enter Withdraw Amount: 100
|
-->-->--> Debited Successfull!!from your ABC Bank Account
-->-->--> Your Current Balance is:900.0
*****
***** WELCOME TO YOUR ATM ACCOUNT *****
*****
*****
***** Enter 1--> Balance Check
***** Enter 2--> Withdraw
***** Enter 3--> Deposit
***** Enter 4--> Check Account Details.
***** Enter 5--> Exit
*****
```

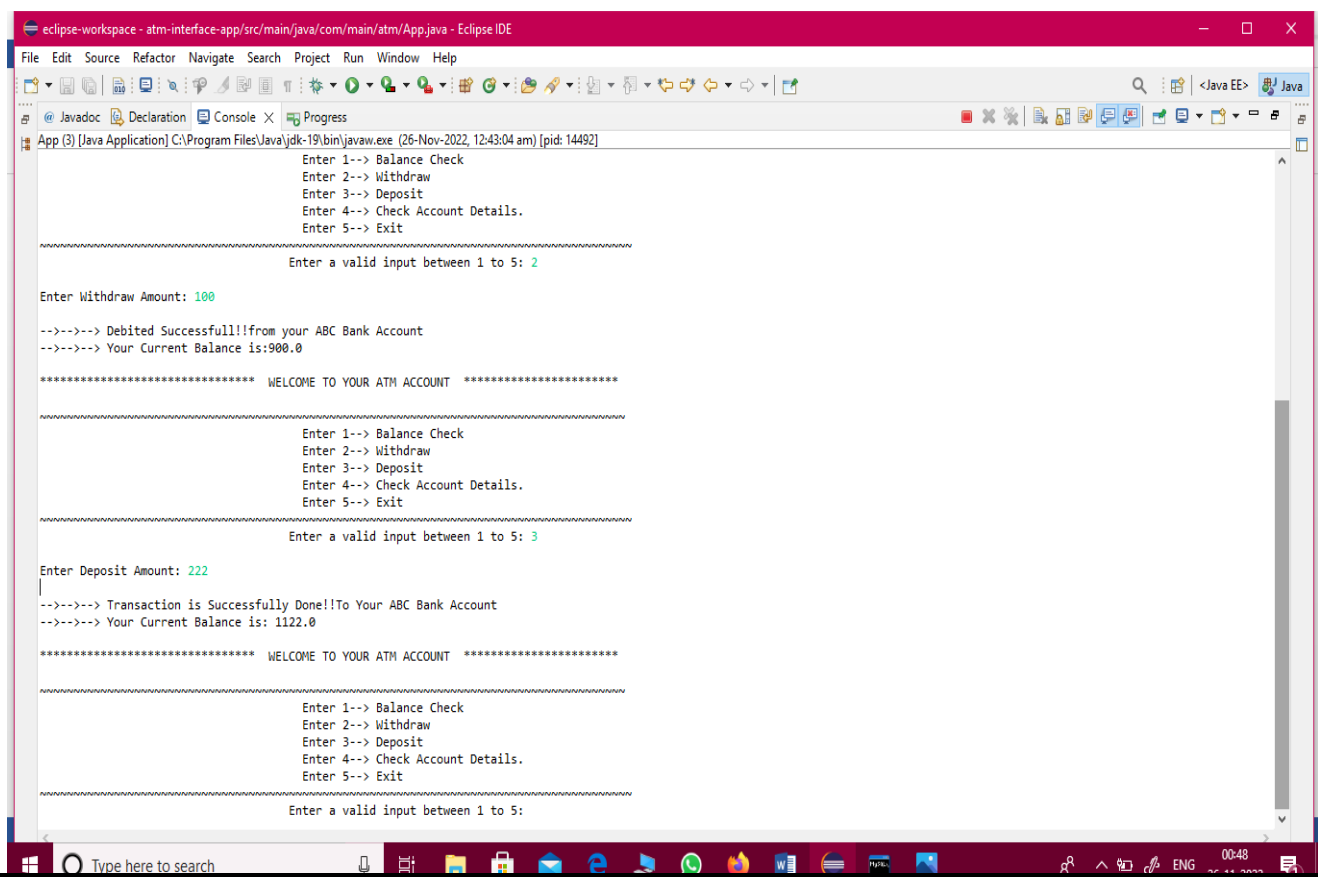
Deposit process:



The screenshot shows the Eclipse IDE with a Java application running. The console output displays the following sequence of events:

```
eclipse-workspace - atm-interface-app/src/main/java/com/main/atm/App.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
App (3) [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (26-Nov-2022, 12:51:44 am) [pid: 12232]
***** WELCOM TO MY ATM INTERFACE *****
*****
***** INSERT THE CARD (ENTER ATMID) : 1234 *****
*****
***** ENTER THE 4 DIGIT PIN : 1111 *****
*****
***** Hai Arjun: WELCOME *****
*****
***** WELCOME TO YOUR ATM ACCOUNT *****
*****
***** Enter 1--> Balance Check *****
***** Enter 2--> Withdraw *****
***** Enter 3--> Deposit *****
***** Enter 4--> Check Account Details. *****
***** Enter 5--> Exit *****
*****
***** Enter a valid input between 1 to 5: 3 *****
*****
Enter Deposit Amount: 222
-->-->--> Transaction is Successfully Done!!To Your ABC Bank Account
-->-->--> Your Current Balance is: 1122.0
***** WELCOME TO YOUR ATM ACCOUNT *****
*****
***** Enter 1--> Balance Check *****
```

Withdraw and deposit in one operation:



The screenshot shows the Eclipse IDE with the same Java application running. The console output displays the following sequence of events:

```
eclipse-workspace - atm-interface-app/src/main/java/com/main/atm/App.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
App (3) [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (26-Nov-2022, 12:43:04 am) [pid: 14492]
***** Enter 1--> Balance Check *****
***** Enter 2--> Withdraw *****
***** Enter 3--> Deposit *****
***** Enter 4--> Check Account Details. *****
***** Enter 5--> Exit *****
*****
***** Enter a valid input between 1 to 5: 2 *****
*****
Enter Withdraw Amount: 100
-->-->--> Debited Successfull!!from your ABC Bank Account
-->-->--> Your Current Balance is:900.0
***** WELCOME TO YOUR ATM ACCOUNT *****
*****
***** Enter 1--> Balance Check *****
***** Enter 2--> Withdraw *****
***** Enter 3--> Deposit *****
***** Enter 4--> Check Account Details. *****
***** Enter 5--> Exit *****
*****
***** Enter a valid input between 1 to 5: 3 *****
*****
Enter Deposit Amount: 222
-->-->--> Transaction is Successfully Done!!To Your ABC Bank Account
-->-->--> Your Current Balance is: 1122.0
***** WELCOME TO YOUR ATM ACCOUNT *****
*****
***** Enter 1--> Balance Check *****
***** Enter 2--> Withdraw *****
***** Enter 3--> Deposit *****
***** Enter 4--> Check Account Details. *****
***** Enter 5--> Exit *****
*****
***** Enter a valid input between 1 to 5: *****
```


ATM user details:

[illegible]

Wrong PIN :

The screenshot shows the Eclipse IDE interface. The title bar reads "eclipse-workspace - atm-interface-app/src/main/java/com/main/atm/App.java - Eclipse IDE". The menu bar includes File, Edit, Source, Refactor, Navigate, Search, Project, Run, Window, and Help. Below the menu is a toolbar with various icons. The main editor area has tabs for "@ Javadoc", "Declaration", "Console", and "Progress". The "Console" tab is active, displaying the following output:

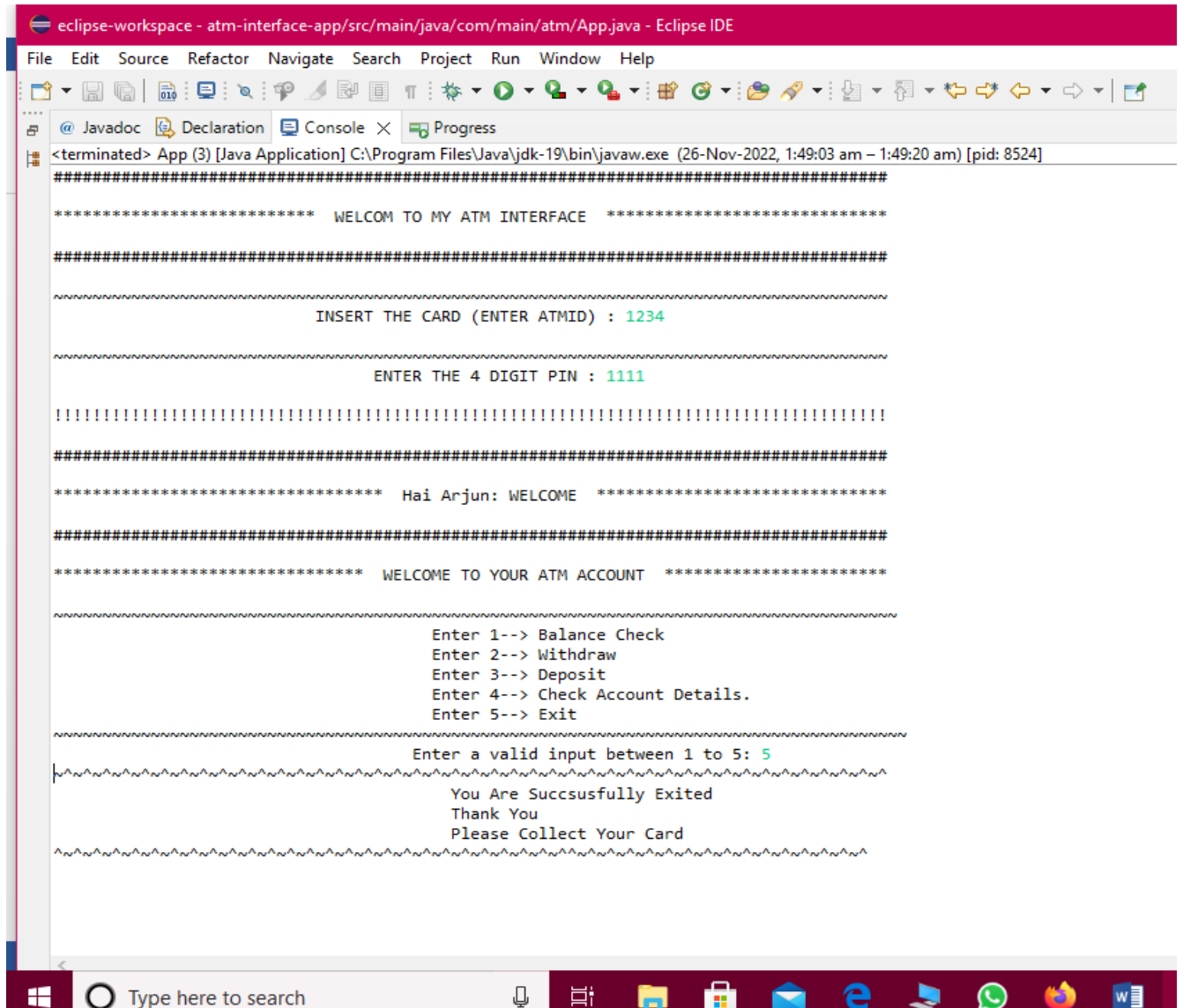
```
<terminated> App (3) [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (26-Nov-2022, 1:20:33 am – 1:20:50 am) [pid: 5080]  
#####  
***** WELCOM TO MY ATM INTERFACE *****  
#####  
~~~~~  
INSERT THE CARD (ENTER ATMID) : 9876  
~~~~~  
ENTER THE 4 DIGIT PIN : 9998  
|  
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!  
  
=====
```

The output indicates that the program terminated after displaying a welcome message and prompts for card ID and PIN. The user entered 9876 for the card ID and 9998 for the PIN. The program then displayed a series of exclamation marks and an equals sign, suggesting an error or end state.

Wrong Input:

```
eclipse-workspace - atm-interface-app/src/main/java/com/main/atm/App.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
@ Javadoc Declaration Console X Progress
App (3) [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (26-Nov-2022, 1:28:59 am) [pid: 8080]
#####
***** WELCOM TO MY ATM INTERFACE *****
#####
~~~~~
INSERT THE CARD (ENTER ATMID) : 1234
~~~~~
ENTER THE 4 DIGIT PIN : 1111
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
#####
***** Hai Arjun: WELCOME *****
#####
***** WELCOME TO YOUR ATM ACCOUNT *****
~~~~~
Enter 1--> Balance Check
Enter 2--> Withdraw
Enter 3--> Deposit
Enter 4--> Check Account Details.
Enter 5--> Exit
~~~~~
Enter a valid input between 1 to 5: 6
|=====
Wrong Input!!!
=====
```

EXIT:



```
eclipse-workspace - atm-interface-app/src/main/java/com/main/atm/App.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
@ Javadoc Declaration Console X Progress
<terminated> App (3) [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (26-Nov-2022, 1:49:03 am - 1:49:20 am) [pid: 8524]
#####
***** WELCOM TO MY ATM INTERFACE *****
#####
~~~~~
INSERT THE CARD (ENTER ATMID) : 1234
~~~~~
ENTER THE 4 DIGIT PIN : 1111
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
#####
***** Hai Arjun: WELCOME *****
#####
***** WELCOME TO YOUR ATM ACCOUNT *****
~~~~~
Enter 1--> Balance Check
Enter 2--> Withdraw
Enter 3--> Deposit
Enter 4--> Check Account Details.
Enter 5--> Exit
~~~~~
Enter a valid input between 1 to 5: 5
~~~~~
You Are Succsusfully Exited
Thank You
Please Collect Your Card
~~~~~
```

Thank you....

Suggestions?.....