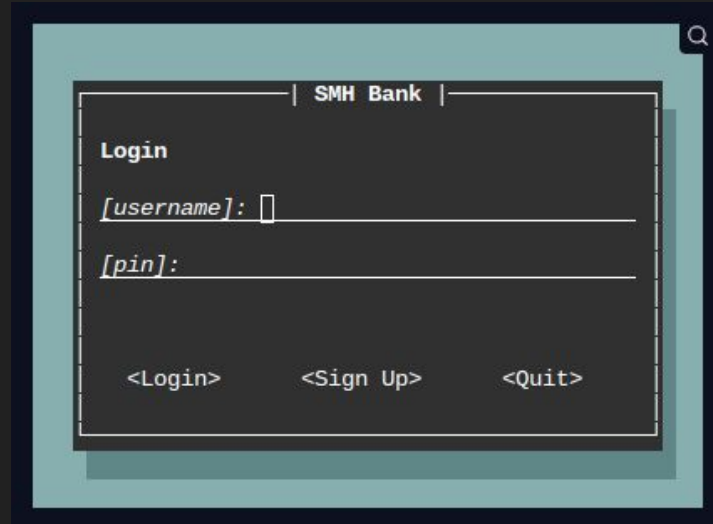


SMH Bank

Withdrawal Tutorial

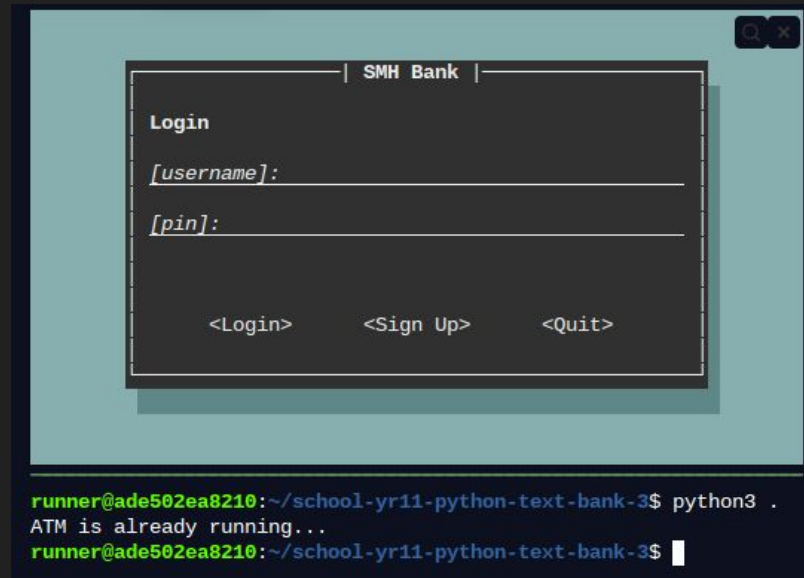
Step 1. Run the Program

The first step is to execute the ATM program. You can do this either by opening “__main__.py” in a file viewer, or by typing “python3 __main__.py” or “python __main__.py” to execute the program using python3, depending on what system you are running on.



Step 1. Run the Program

If the program doesn't run then this means that the ATM is being executed in another process. The ATM cannot be executed twice at the same time, so before running the program make sure that no instance of the program is already running.

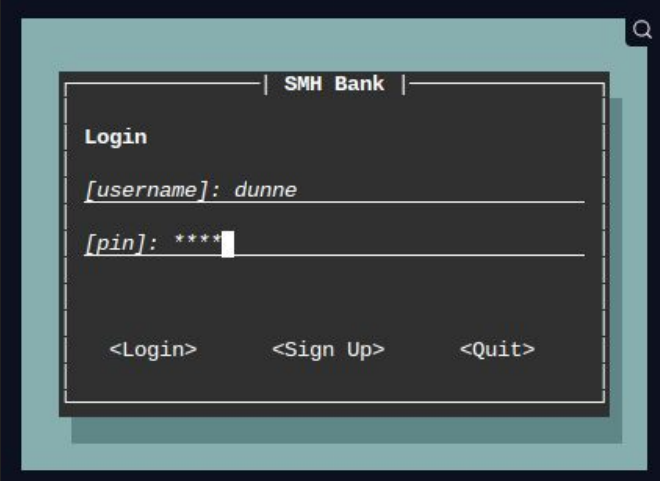


The screenshot displays a terminal window with a light blue background. Inside the terminal, there is a window titled "SMH Bank" with a dark gray background. The window contains a "Login" section with two input fields labeled "[username]:" and "[pin]:". Below these fields are three buttons: "<Login>", "<Sign Up>", and "<Quit>". Below the terminal window, the terminal output shows the command `python3 .` being executed, resulting in the message "ATM is already running...".

```
runner@ade502ea8210:~/school-yr11-python-text-bank-3$ python3 .  
ATM is already running...  
runner@ade502ea8210:~/school-yr11-python-text-bank-3$
```

Step 2. (a). Login

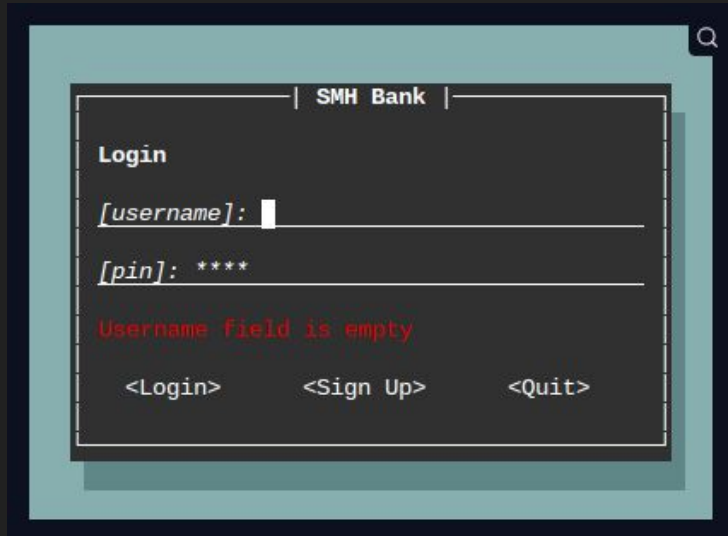
You should now be at the Login screen. In this screen you can enter your username and pin in the input fields. To move the focus between input fields and buttons, press the “Tab” key and “Shift+Tab” keys. To click on a button, move the focus to the button and click the “Enter” key, or if your platform supports it, then hover over the button with your cursor and left click. The username field is case sensitive and usernames which are not alphanumeric or do not start with a letter are not valid. The pin field must be four digits (0-9).



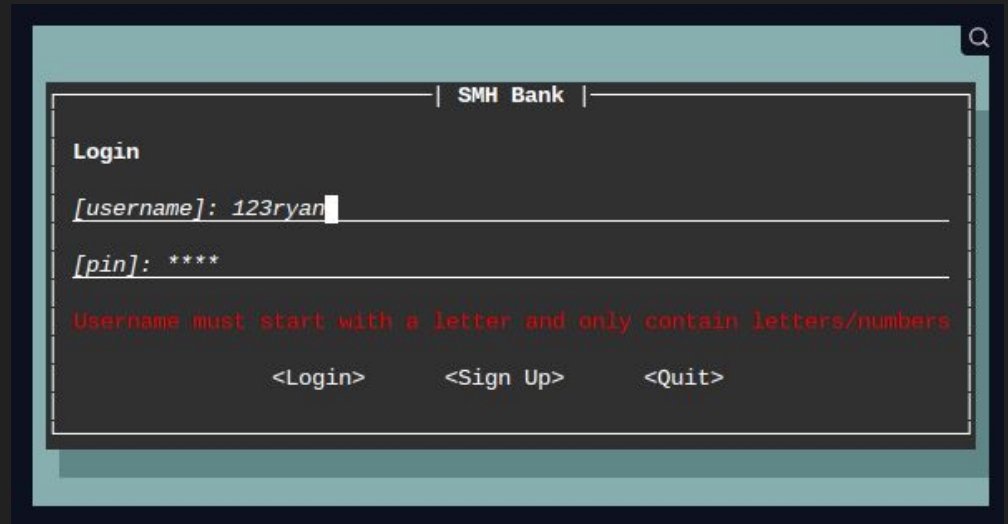
The screenshot shows a terminal window titled "SMH Bank" with a "Login" prompt. The username field is labeled "[username]: dunne" and the pin field is labeled "[pin]: ****" with a cursor at the end. At the bottom, there are three buttons: "<Login>", "<Sign Up>", and "<Quit>". The terminal window is set against a light blue background with a dark blue border.

Step 2. (a). Login

The images below depicts a user entering invalid usernames and the associated error messages. If you see one of these error messages, make sure the username entered starts with a letter and only consists of numbers and letters, eg. ryan123.



A screenshot of a terminal window titled "SMH Bank". The window contains a "Login" section with two input fields: "[username]:" and "[pin]: ****". The "[username]:" field is empty, and a red error message "Username field is empty" is displayed below it. At the bottom of the window, there are three buttons: "<Login>", "<Sign Up>", and "<Quit>".



A screenshot of a terminal window titled "SMH Bank". The window contains a "Login" section with two input fields: "[username]:" and "[pin]: ****". The "[username]:" field contains the text "123ryan", and a red error message "Username must start with a letter and only contain letters/numbers" is displayed below it. At the bottom of the window, there are three buttons: "<Login>", "<Sign Up>", and "<Quit>".


Step 2. (a). Login

The images below depicts a user entering invalid pins and the associated error messages. If you see one of these error messages, make sure the pin entered is exactly four digits (0-9), eg. 1234.



A terminal window titled "SMH Bank" showing a login prompt. The username "ryan123" has been entered. The pin field is currently empty, indicated by a cursor. A red error message "Please enter 4 digits for Pin field" is displayed below the pin field. At the bottom, there are three options: "<Login>", "<Sign Up>", and "<Quit>".

```
| SMH Bank |
Login
[username]: ryan123
[pin]: 
Please enter 4 digits for Pin field
<Login>    <Sign Up>    <Quit>
```



A terminal window titled "SMH Bank" showing a login prompt. The username "ryan123" has been entered. The pin field is filled with asterisks, indicating a masked input. A red error message "Please enter 4 digits for Pin field" is displayed below the pin field. At the bottom, there are three options: "<Login>", "<Sign Up>", and "<Quit>".

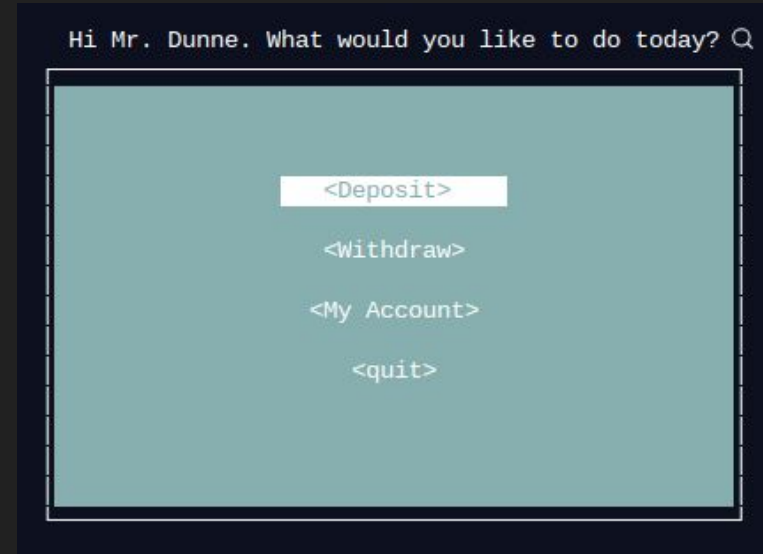
```
| SMH Bank |
Login
[username]: ryan123
[pin]: *****
Please enter 4 digits for Pin field
<Login>    <Sign Up>    <Quit>
```

Step 2. (a). Login

Once you have entered your username and pin and there is no error message, click on the Login button to login to the ATM (left image). You will be taken to the Menu screen (right image).



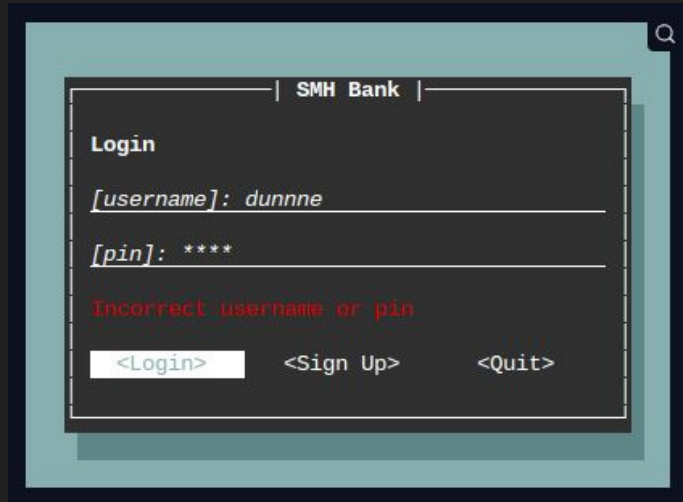
The left image shows the login screen of an ATM. At the top, it says "SMH Bank". Below that, the word "Login" is displayed. There are two input fields: the first is labeled "[username]: dunne" and the second is labeled "[pin]: ****". At the bottom, there are three buttons: "<Login>", "<Sign Up>", and "<Quit>".



The right image shows the menu screen of the ATM. At the top, it says "Hi Mr. Dunne. What would you like to do today?". Below that, there are four buttons: "<Deposit>", "<Withdraw>", "<My Account>", and "<quit>".

Step 2. (a). Login

If you are presented with the error message “Incorrect username or pin” when you try to login, this means that you have entered either your username or pin incorrectly. Check that you have entered both fields correctly.



A screenshot of a terminal window titled "SMH Bank" showing a login interface. The interface has a title "Login" and two input fields. The first field is labeled "[username]: dunne" and the second is labeled "[pin]: ****". Below the input fields, a red error message "Incorrect username or pin" is displayed. At the bottom, there are three buttons: "<Login>", "<Sign Up>", and "<Quit>". The terminal window is set against a dark background with light-colored text.



A screenshot of a terminal window titled "SMH Bank" showing a login interface. The interface has a title "Login" and two input fields. The first field is labeled "[username]: dunne" and the second is labeled "[pin]: ****". Below the input fields, a red error message "Incorrect username or pin" is displayed. At the bottom, there are three buttons: "<Login>", "<Sign Up>", and "<Quit>". The terminal window is set against a dark background with light-colored text.

Step 2. (b). Sign Up

If you do not already have an account with this ATM, then you will first have to sign up to create a new account. When you are at the login screen, click on the Sign Up button (left image), and you will be taken to the Sign Up screen (right image).



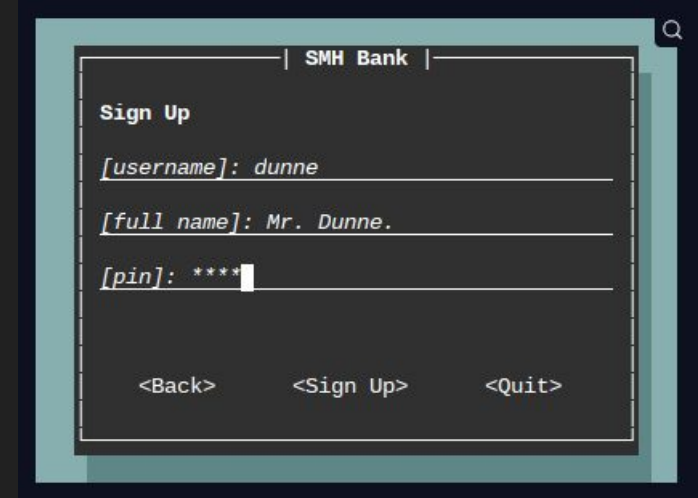
The image shows a terminal window titled "SMH Bank" with a search icon in the top right corner. The window displays a "Login" screen with two input fields: "[username]:" and "[pin]:". At the bottom, there are three buttons: "<Login>", "<Sign Up>" (which is highlighted with a light blue background), and "<Quit>".



The image shows a terminal window titled "SMH Bank" with a search icon in the top right corner. The window displays a "Sign Up" screen with three input fields: "[username]:" (with a cursor), "[full name]:", and "[pin]:". At the bottom, there are three buttons: "<Back>", "<Sign Up>", and "<Quit>".

Step 2. (b). Sign Up

You should now be at the sign up screen. In this screen, you can enter the username of your new account, your full name, and the pin for your new account. All of these fields are required and cannot be empty or you will not be able to sign up. The username field is case sensitive and usernames which are not alphanumeric or do not start with a letter are not valid. The username chosen must also be unique, that is, if another user already has that username, then you will not be able to sign up with that username. The pin field must be four digits (0-9).



A screenshot of a terminal window titled "SMH Bank" showing a "Sign Up" screen. The screen has a dark background with light blue text. It contains three input fields: "[username]: dunne", "[full name]: Mr. Dunne.", and "[pin]: ****" with a cursor at the end. At the bottom, there are three buttons: "<Back>", "<Sign Up>", and "<Quit>". A magnifying glass icon is in the top right corner of the terminal window.

```
| SMH Bank |  
  
Sign Up  
[username]: dunne  
[full name]: Mr. Dunne.  
[pin]: ****  
  
<Back>      <Sign Up>      <Quit>
```

Step 2. (b). Sign Up

The images below depicts a user entering invalid usernames and the associated error messages. If you see one of these error messages, make sure the username entered starts with a letter and only consists of numbers and letters, eg. ryan123.



SMH Bank

Sign Up

[username]:

[full name]: Mr. Dunne.

[pin]: ****

Username field is empty

<Back> <Sign Up> <Quit>



SMH Bank

Sign Up

[username]: 123ryan

[full name]: Mr. Dunne.

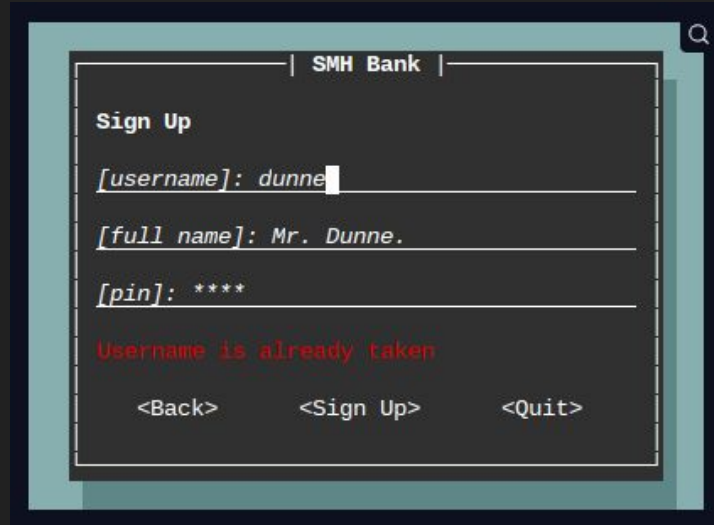
[pin]: ****

Username must start with a letter and only contain letters/numbers

<Back> <Sign Up> <Quit>

Step 2. (b). Sign Up

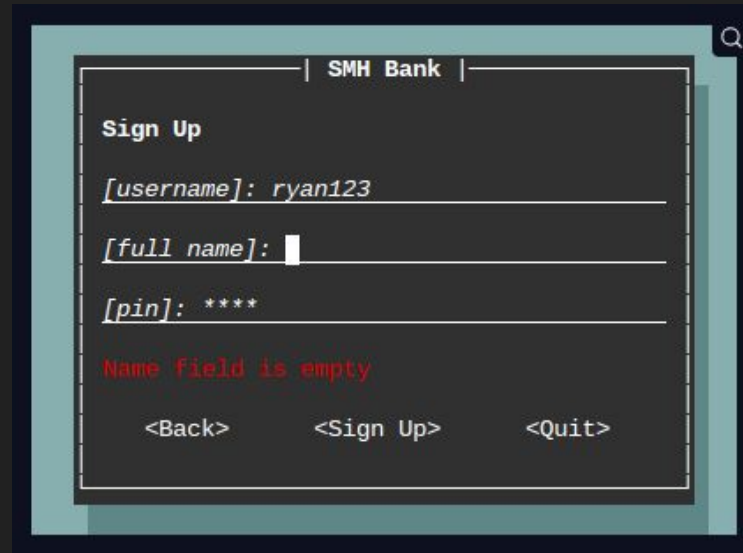
If the username entered has already been taken, that is, another user already has that username, then the error message “Username is already taken” will be shown and you will not be able to sign up. Please choose a different username.



The image shows a screenshot of a 'Sign Up' form for 'SMH Bank'. The form is titled 'Sign Up' and contains three input fields: '[username]: dunne', '[full name]: Mr. Dunne.', and '[pin]: ****'. Below the input fields, a red error message 'Username is already taken' is displayed. At the bottom of the form, there are three buttons: '<Back>', '<Sign Up>', and '<Quit>'. The form is enclosed in a light blue border with a search icon in the top right corner.

Step 2. (b). Sign Up

The images below depicts a user entering an invalid full name and the associated error message. If you see this error message, make sure the full name entered is not empty.



The image shows a terminal window titled "SMH Bank" with a search icon in the top right corner. Inside the terminal, there is a "Sign Up" form with the following fields and values:

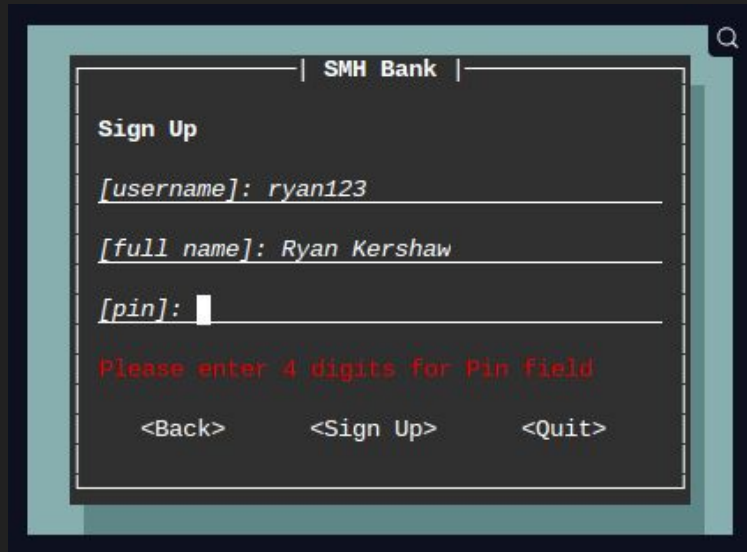
- `[username]: ryan123`
- `[full name]:` (empty field)
- `[pin]: ****`

Below the fields, a red error message is displayed: `Name field is empty`.

At the bottom of the form, there are three navigation options: `<Back>`, `<Sign Up>`, and `<Quit>`.

Step 2. (b). Sign Up

The images below depicts a user entering invalid pins and the associated error messages. If you see one of these error messages, make sure the pin entered is exactly four digits (0-9), eg. 1234.



SMH Bank

Sign Up

[username]: ryan123

[full name]: Ryan Kershaw

[pin]:

Please enter 4 digits for Pin field

<Back> <Sign Up> <Quit>



SMH Bank

Sign Up

[username]: ryan123

[full name]: Ryan Kershaw

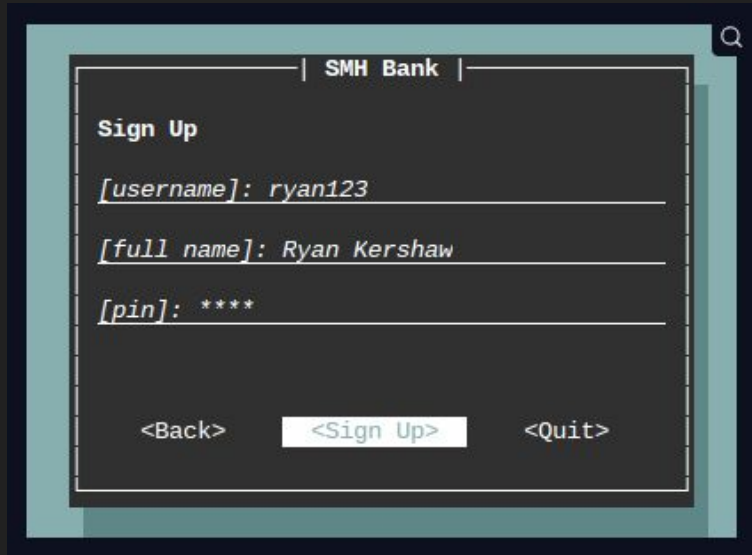
[pin]: *****

Please enter 4 digits for Pin field

<Back> <Sign Up> <Quit>

Step 2. (b). Sign Up

Once you have entered your username, full name and pin and there is no error message, click on the Sign Up button to sign up to the ATM, creating your new account (left image). You will be taken to the Menu screen (right image).



SMH Bank

Sign Up

[username]: ryan123

[full name]: Ryan Kershaw

[pin]: ****

<Back> <Sign Up> <Quit>

The left image shows a terminal window titled "SMH Bank". Inside, there is a "Sign Up" section with three input fields. The first field is labeled "[username]: ryan123", the second is "[full name]: Ryan Kershaw", and the third is "[pin]: ****". At the bottom of the terminal, there are three buttons: "<Back>", "<Sign Up>", and "<Quit>". The "<Sign Up>" button is highlighted with a light blue background.



Hi Ryan Kershaw. What would you like to do today? Q

<Deposit>

<Withdraw>

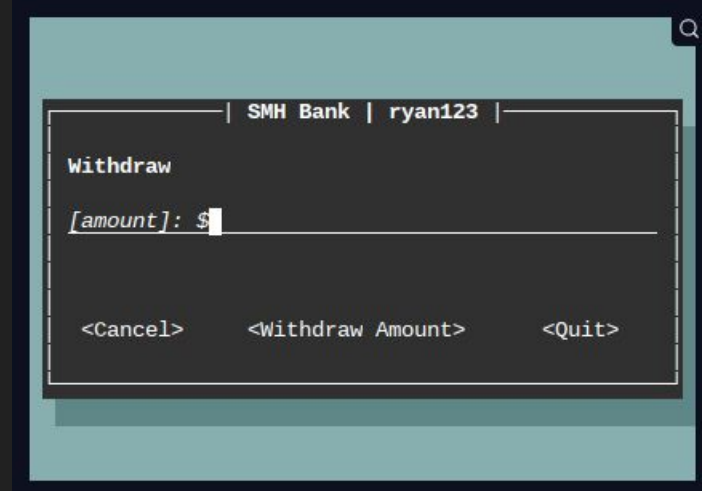
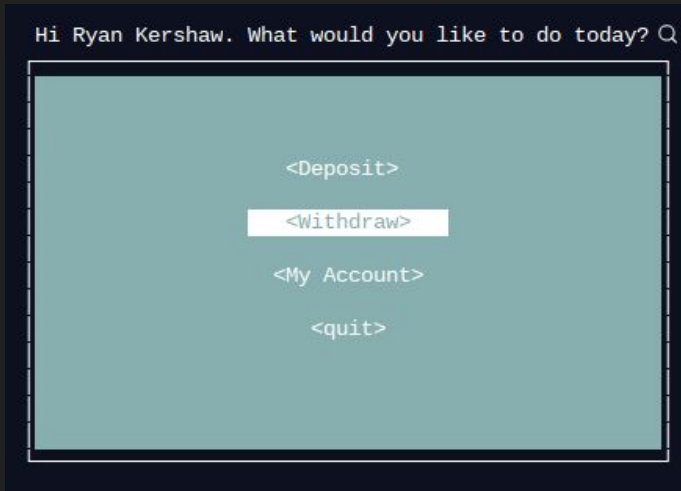
<My Account>

<quit>

The right image shows a terminal window titled "Hi Ryan Kershaw. What would you like to do today? Q". Inside, there is a menu with four options: "<Deposit>", "<Withdraw>", "<My Account>", and "<quit>". The "<Deposit>" option is highlighted with a light blue background.

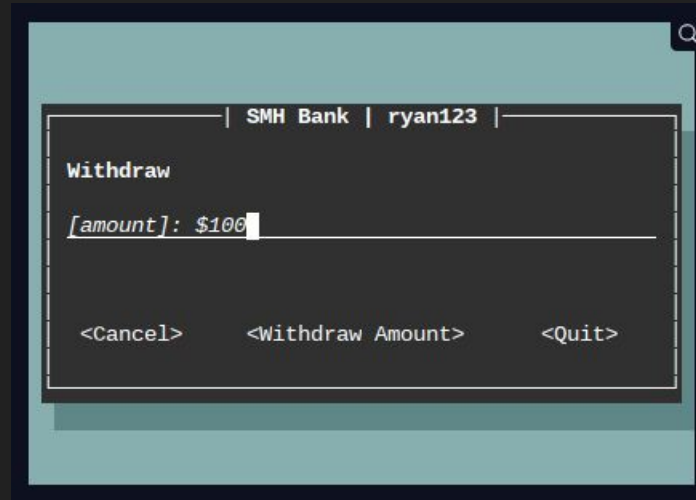
Step 3. Go to Withdrawal Page

You should now be at the Menu screen (left image). Click on the Withdraw button either with your mouse/trackpad or by moving the focus to it using the “up”/”down”, or “Tab”/”Shift+Tab” arrow keys then pressing the “Enter” key. You will be taken to the Withdrawal screen (right image).



Step 4. Enter Amount to Withdraw

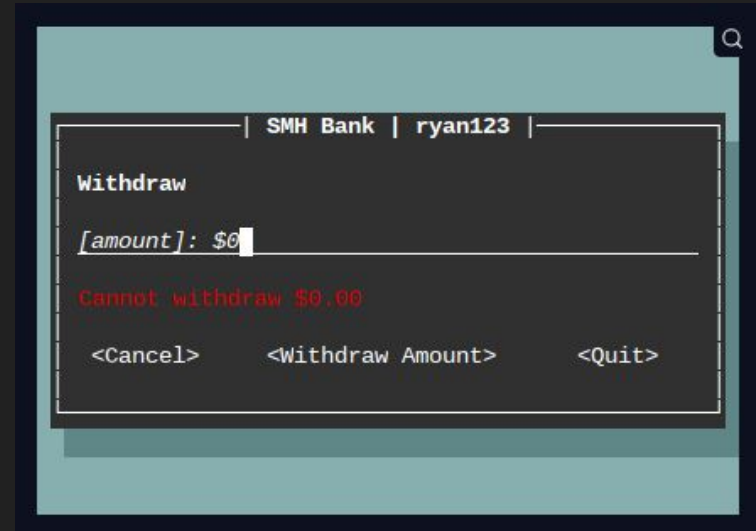
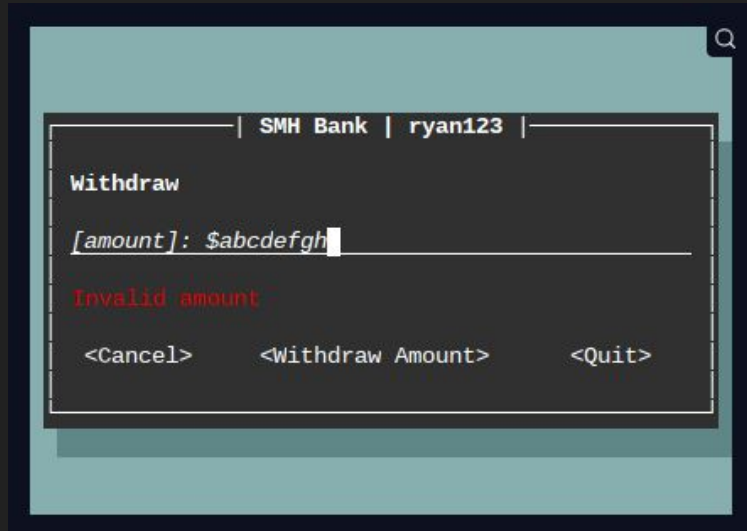
You should now be at the Withdrawal screen. Enter the amount you want to withdraw in the “amount” text field. You can only withdraw a multiple of \$20 as the ATM only holds \$20 bills. This means you can withdraw \$20, \$40, etc. but not \$1 or \$10, etc.



The image shows a terminal-style window for an ATM interface. At the top, a status bar displays "SMH Bank" and the user ID "ryan123". The main title of the window is "Withdraw". Below the title, there is a text input field labeled "[amount]:" which contains the value "\$100" and a cursor. At the bottom of the window, there are three buttons: "<Cancel>", "<Withdraw Amount>", and "<Quit>". The entire window is set against a light blue background.

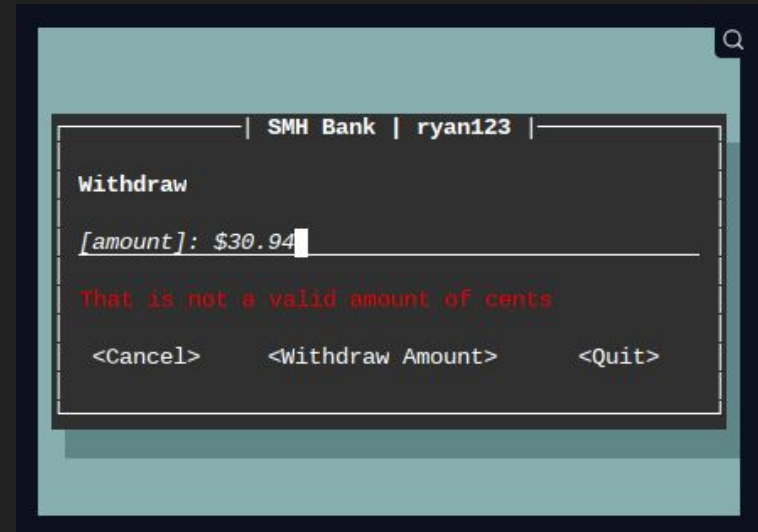
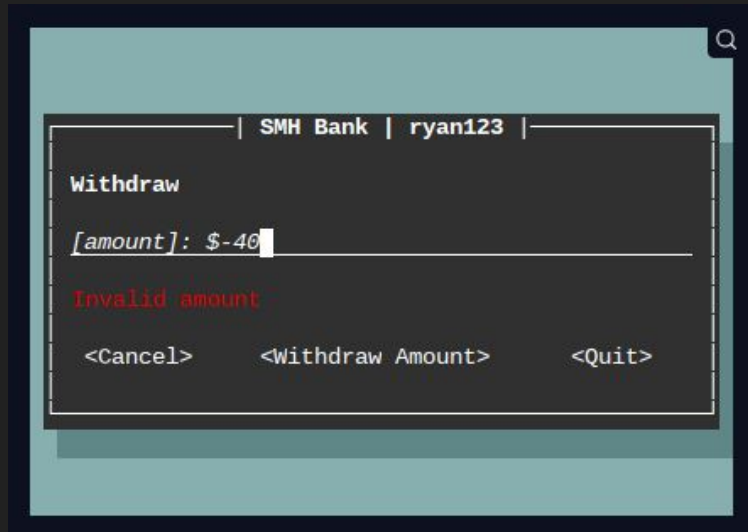
Step 4. Enter Amount to Withdraw

The images below depicts a user entering invalid amounts to withdraw and the associated error messages. If you see one of these error messages, make sure the amount entered is numerical, is positive, and is a multiple of \$20.



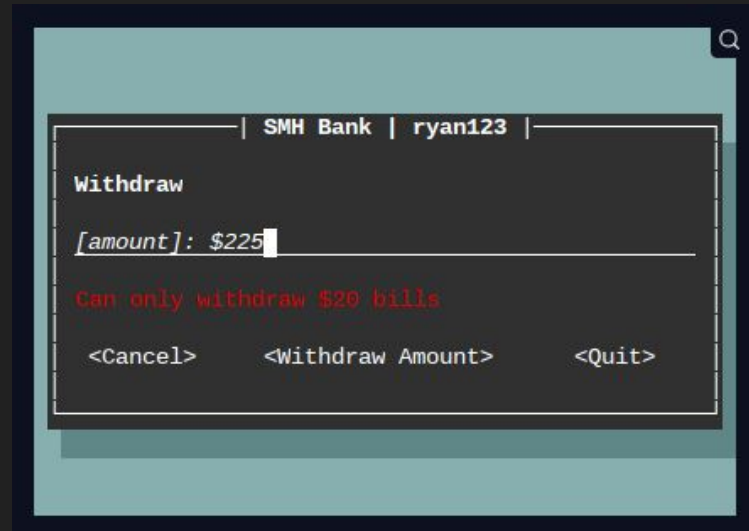
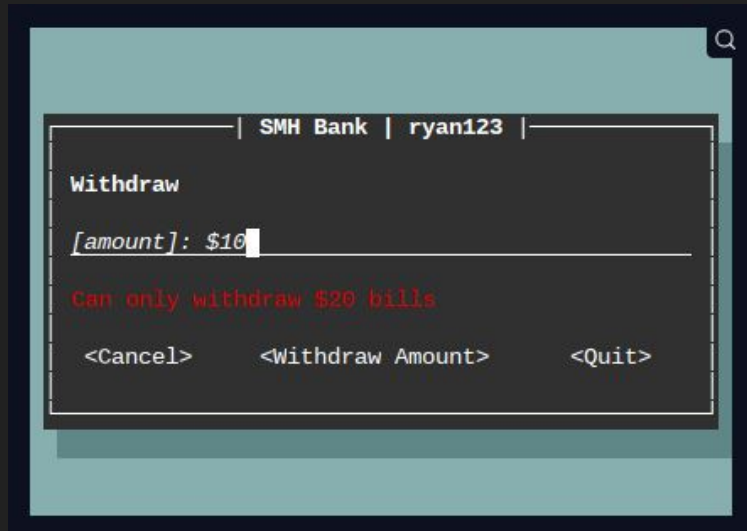
Step 4. Enter Amount to Withdraw

The images below depicts a user entering invalid amounts to withdraw and the associated error messages. If you see one of these error messages, make sure the amount entered is numerical, is positive, and is a multiple of \$20.



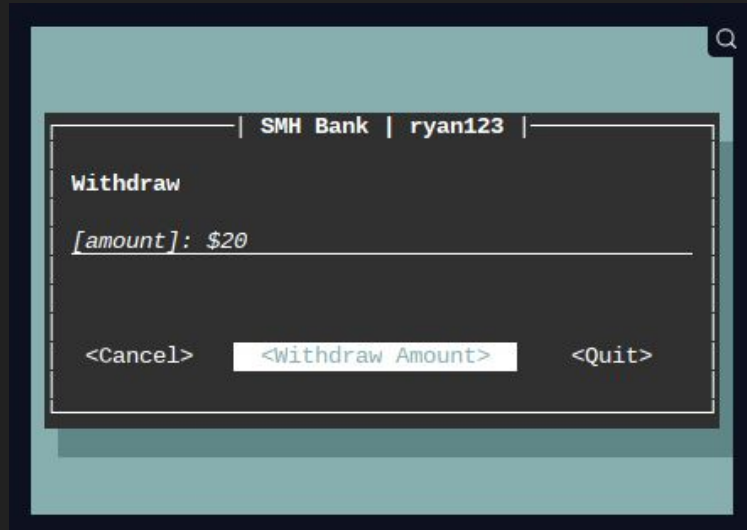
Step 4. Enter Amount to Withdraw

The images below depicts a user entering invalid amounts to withdraw and the associated error messages. If you see one of these error messages, make sure the amount entered is numerical, is positive, and is a multiple of \$20.



Step 5. Make Withdrawal

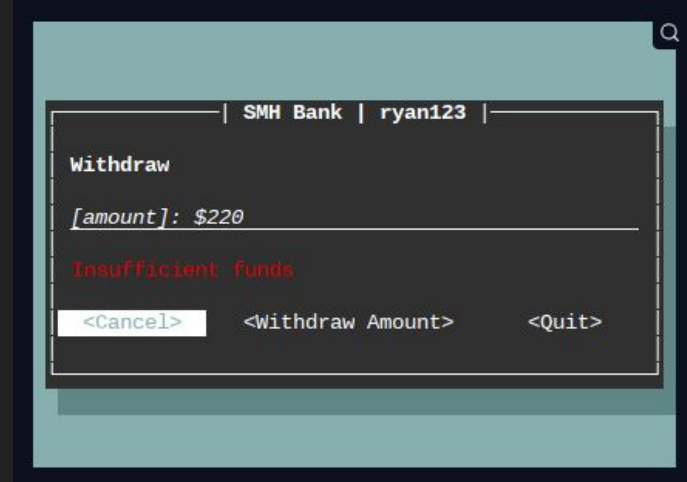
Once you have entered the amount you want to withdraw, and there is no error message, click on the “Withdraw Amount” button to withdraw the given amount from your bank account. If the withdrawal is successful, you will be taken back to the Menu screen.



A screenshot of a terminal window with a light blue background. The terminal has a title bar with a search icon in the top right corner. Inside the terminal, the text "SMH Bank | ryan123 |" is displayed at the top. Below this, the word "Withdraw" is shown. A line of text "[amount]: \$20" is followed by a horizontal line. At the bottom, there are three buttons: "<Cancel>", "<Withdraw Amount>" (which is highlighted with a white background), and "<Quit>".

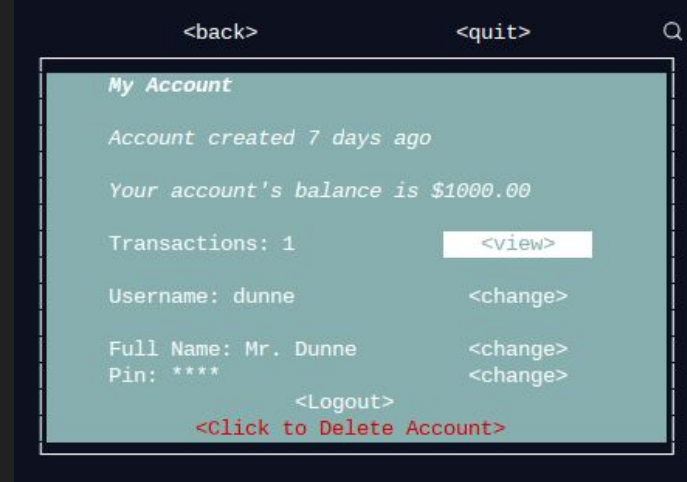
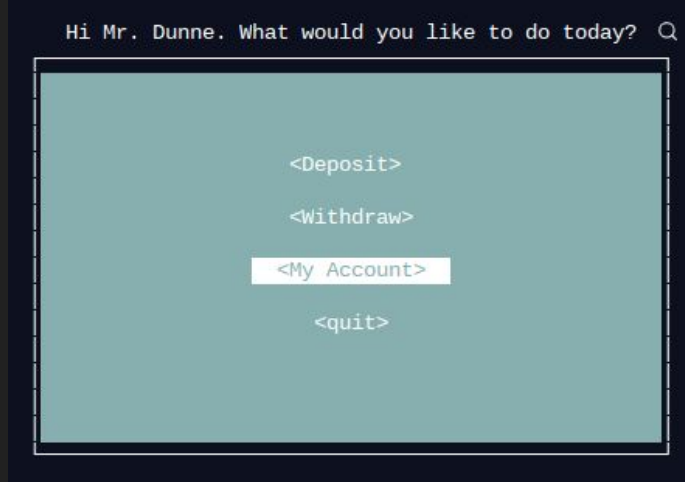
Step 5. Make Withdrawal

If you are presented with the error message “Insufficient funds” when you try to withdraw the amount, then this means that you do not have enough money in your bank account to make the withdrawal. Either withdraw a smaller amount or cancel the withdrawal. To cancel the withdrawal, click on the “Cancel” button and you will be taken back to the menu screen.



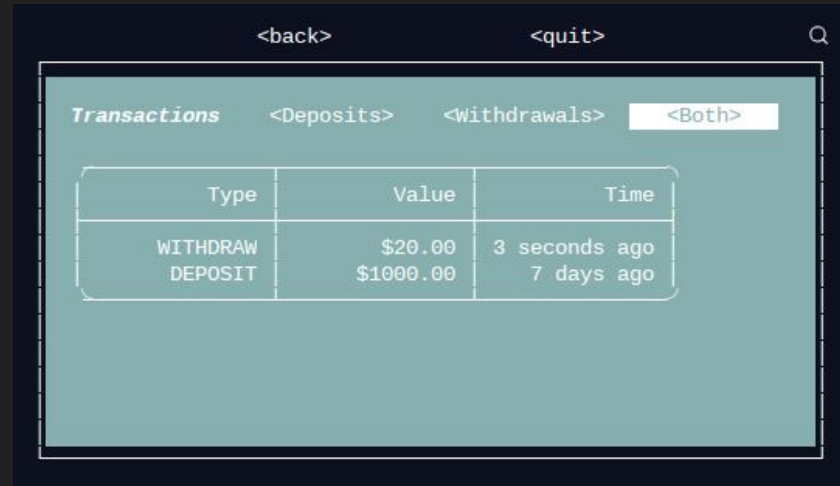
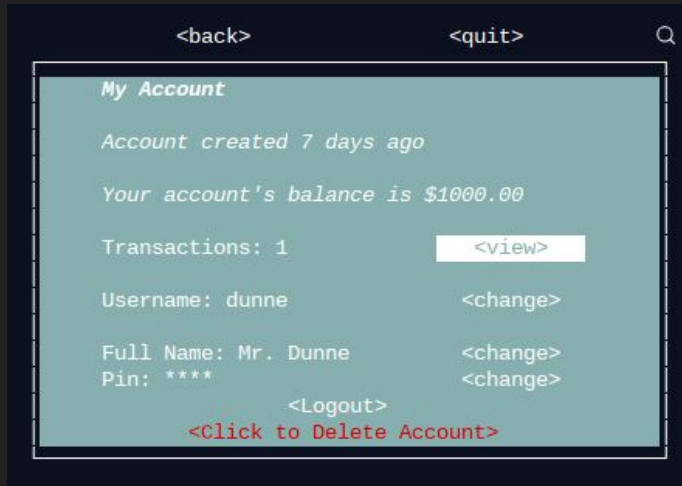
Step 6. View Transaction

Once you make the withdrawal, this transaction will be recorded and saved. For you to view this transaction, go to the “My Account” screen (right image), which is accessible by clicking on the “My Account” button on the Menu screen (left image).



Step 6. View Transaction

You should now be at the “My Account” screen. To view your recent withdrawal transaction, click on the “view” button to the right of the “Transactions” label (left image). You will be taken to the transactions screen (right image).



Step 7. View Receipt

Once you make the withdrawal, a receipt will be printed. This receipt is located inside the receipts directory. To access this receipt, open the receipts directory, and open up the folder with the same name as your username. Inside this folder will be all of the receipt text files printed for your account. Each receipt is named after the timestamp of the transaction. To open your latest withdrawal receipt, open up the most recently created file in your account's receipts folder.

