1. First, display a welcome message.
2. Main Menu

[1] Load Starting Data  
[2] Show User Records  
[3] Edit Users  
[4] Enter User View  
[5] Show System Usage Summary  
[6] Credits and Exit

1. [1] Load Starting Data

A table with numbers and letters

Description automatically generated

If the user enters options 2 to 5 before starting data is loaded, an error message should be shown, and then the system returns to the Main Menu.

1. [2] Show User Record

[After the starting data is loaded]

* Displays all the fields of all user records
* Records are sorted in alphabetical order based on the ID values.
* The latest set of data since the starting data is loaded
* After showing the records, the system returns to the Main Menu.

1. [3] Edit User

[After the starting data is loaded]

* Message: For the next user input of a User ID
* ID does not exist >> Create user
* Asks the user to input three fields

1. **Type**
2. **Token Balance**
3. **Auto Top-up**

If wrong field values. Allows TWO more retries.

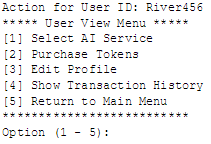
Three times wrong, no user is added. Error message  
and returns to the Main Menu.

* ID exist >> Delete user
* Displays all the information of the user
* “Yes/No” confirmation on the delete operation
* Max user records: 100
* After, summary of the above operation and return

1. [4] Enter User View

[After the starting data is loaded]

* Message: For the next user input of a User ID
* ID does not exist >> Error message and returns to the Main Menu
* ID exist >> User View Menu



* [1] Select AI Service

．Shows the list of available AI services and asks user for the choice

．If all user inputs are valid >>

AI service is allowed + token balance is enough

User’s token balance will be updated

．If user “Auto Top-up” is “Y” >>

Display the extra money + User’s final token balance

User’s token balance will be updated

．The auto top-up amount >>

minimum extra tokens + multiple of $20

．If user “Auto Top-up” is “N” >>

If input (X) or balance (X) >>

Message: will not be paid

User’s token balance will not be updated

．Print user token balance and return to the User View Menu.

* [2] Purchase Tokens

．1 token costs $2

．Message: You should have an even integer value

．If input (X), give an error message

* [3] Edit Profile

．Change “Account Type” or the “Auto Top-up” setting

．If input(v), should be update

．if input(x) over 2 times, error message and return User View

* [4] Show Transaction History

．Show this user all token transaction records history

．All tokens transactions in

[1] Select AI Service [2] Purchase Tokens

Should be display.

．Display in the order that they were carried out

．In [1], number of tokens and ”Auto Top-up” state

．If ”Auto Top-up” on,

extra money paid for buying the extra tokens display

．In [2], number of tokens purchased and amount of money spent

．Last, display

1. original token balance
2. final token balance
3. change in token balance
4. TOTAL amount of money paid for buying tokens

(including by using “auto top-up”)

．If user have no transaction, display a message.

．After, returns to the User View Menu.

* [5] Return to Main Menu

．returns to the Main Menu

1. **[5] Show System Usage Summary**

[After the starting data is loaded]

By All user:

* the number of tokens spent on each of the AI service
* the total number of tokens spent on all AI service
* the total amount of money for buying tokens (including “auto top-up”)

．After, returns to the User View Menu.

1. **[6] Credits and Exit**

* Message: Confirm?
* Input N/n >> return Main Menu
* Input Y/y >> display student name, student ID, tutorial group

And terminates

* Other input >> ask for confirm again

AI services that we have

A table with text and numbers

Description automatically generated

A white and black text with black text

Description automatically generated