Idea:

The idea that my group came was to create an exercise app where users can log in an choose what they want to work on

Specifications:

Input Data:

Users will input the following:

Create a username to be stored in a database

Create a password which will also be stored in the system

Once logged in:

Name

Age/Gender/Weight

Height

Targets: (three options)

Lose weight

Lean/Tone

Gain

Level:

Beginner

Intermediate

Advanced

Valid and Invalid Data:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data | Type | Valid Data | Invalid Data | Action if Wrong data type entered |
| Name | Alphanumeric | String | Integers | Ask user to enter name again |
| weight | numeric | Integer | String | Highlight incorrect data type |
| height | numeric | Integer | String | Highlight incorrect data type |
| target | Drop down menu |  |  | N/A |
| Level | Drop down menu |  |  | N/A |
|  |  |  |  |  |
|  |  |  |  |  |

Who will use the Software:

The software is to be used by anyone that would like to exercise. The type of interface that will be used will be a Graphical User Interface.

Design:

Database table structures:

Profile:

ID

Name

Last\_name

Weight

Gender

Target

Level

BMI

Workouts:

ID

Equipment

Type

Workout

Workout Archive

ID

Workout



Table Structures:

**Profile Table:**

|  |  |  |  |
| --- | --- | --- | --- |
| Field Name | Data Type | Field Size | Description |
| ID | Integer | Long integer | A unique identification number for each user |
| Username | Char | 12 | Username used by the user to login |
| Name | Char | 15 | The user’s first name |
| Last name | Char | 15 | The user’s last name |
| Weight | Integer | 3 | Shows the user’s weight |
| Gender | Boolean | 1 | Shows whether the student is male or female |
| Target | Boolean | 1 | Shows what area the user would like to target |
| Level | Boolean | 1 | Shows what fitness level of the user |
| BMI | Double | 4 | Shows the User’s calculated BMI |

This table is used to store the user’s details. Each user will have a unique user ID which will be linked to all user records. Then a username which the user will use to login and a password.

**Workouts Table:**

|  |  |  |  |
| --- | --- | --- | --- |
| Field Name | Data Type | Field Size | Description |
| ID | Integer | Long integer | A unique identification number for each user |
| Equipment | Char | 15 | Identifies the equipment used |
| Type | Char | 15 | Area targeted |
| Workout | Char | 15 | Name of the workout |

This table stores all the workouts and details on the workouts.

**Workout Archive:**

|  |  |  |  |
| --- | --- | --- | --- |
| Field Name | Data Type | Field Size | Description |
| ID | Integer | Long integer | A unique identification number for each user |
| Workout | Char | 15 | Name of the workout |

This table is used to archive the user’s progress, which is all the workouts that they have done.

**Systems Flowchart Diagram:**

User Inputs their details

Data entered is validated to ensure that the correct data is entered

Display an error message if incorrect data is entered

User details stored in the Profile table

Databases updated

User logs into the system using

Username and password

Once logged in the user selects their workout for the day

Work out details are stored in the workout archive to store the user’s progress

The system outputs the User’s workout