

Console Sale Report Web App

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I) Introduction

The main goal of this web app is to demonstrate the ability of querying data from regional database, modifying by employing Python and its library as well as displaying the data in the web browser. Web app interface is built around HTML, CSS and JavaScript, however, they are not the main focus and therefore user interface is somewhat limited. Still, I have done the best with all available time and resources in order to deliver good user experience for the Web App.

The main purpose for the this Web App is to generate sale data report of three giant console manufacturers, namely: Nintendo, Microsoft and Sony from Wikipedia in December 2018 and stored in "data.db". Beside this function, the Web App also allow user to modify the database by insert new entry, update the data and delete the data.

II) How to use the Web App

a) Prerequisites:

A computer with latest web browser version, Firefox or Chrome.

Python 3 with bottle library installed.

b) Run the Web App

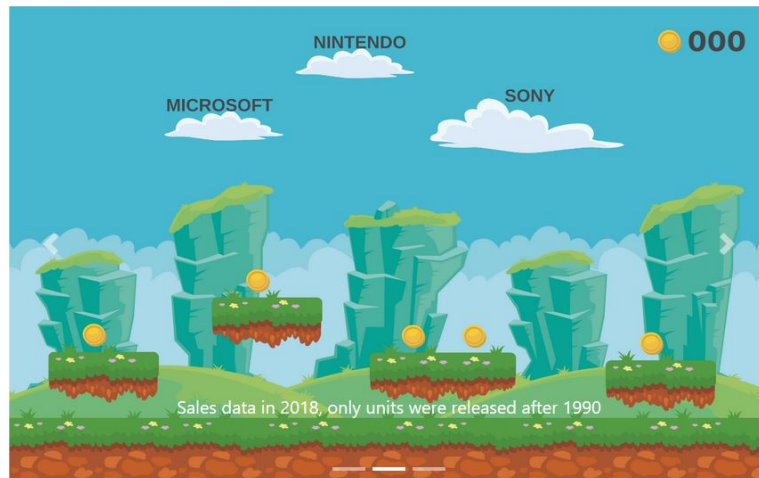
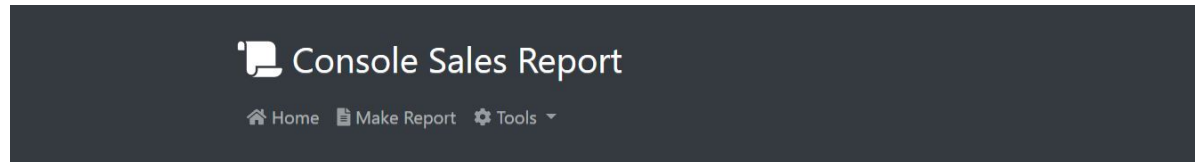
Navigating to the folder of web App through **Command Prompt (CMD)** and run **webApp.py**

Open web browser and access URL: **localhost:9999 or 127.0.0.1:9999**

c)Using the Web App

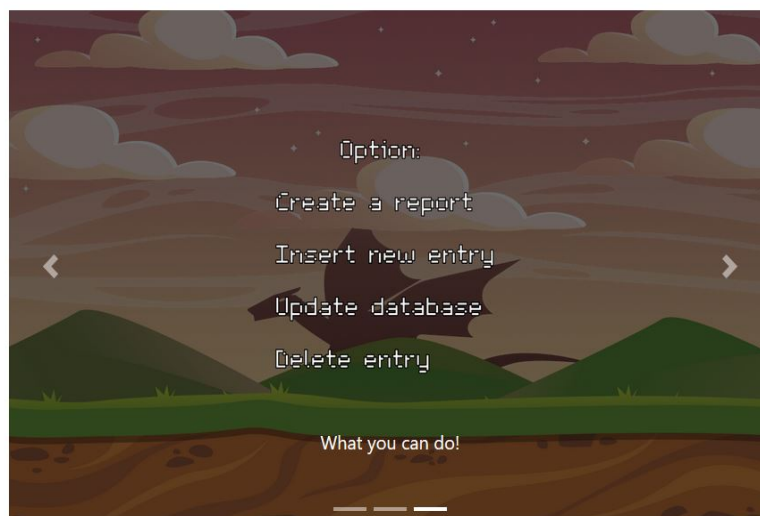
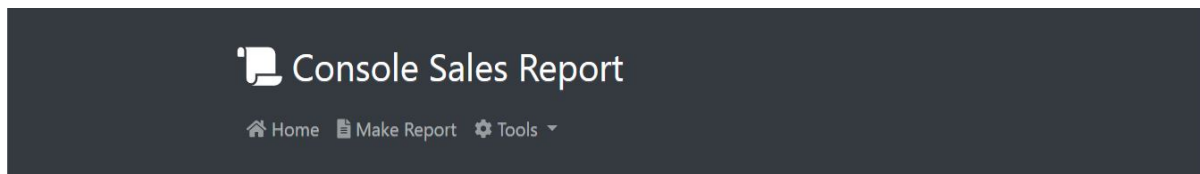
1)Homepage

The homepage has a carousel of 3 pictures, each presents the idea of the web App. User can click on the title of Web App or **Home** in the navigator any time to return homepage.



Disclaimer: This Website is created for demonstration/ educational purpose only.

Source of dataset: Wikipedia (last update: Dec 2018)







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Source of dataset: Wikipedia (last update: Dec 2018)


2)Making a report

Accessing report generator by simply click on **Make Report** in the navigator


 **Console Sales Report**

 Home  Make Report  Tools ▾


 Select Platform(s) below to make a report

 **Nintendo**

☐ NES classic edition ☐ Super NES classic edition ☐ Wii U ☐ GameCube ☐ Nintendo Switch ☐ Nintendo 64
☐ Nintendo Entertainment System ☐ Nintendo 3DS ☐ Gameboy advance ☐ Nintendo DS ☐ Wii ☐ GameBoy

 **Microsoft**

☐ Xbox ☐ Xbox One ☐ Xbox 360

 **Sony**

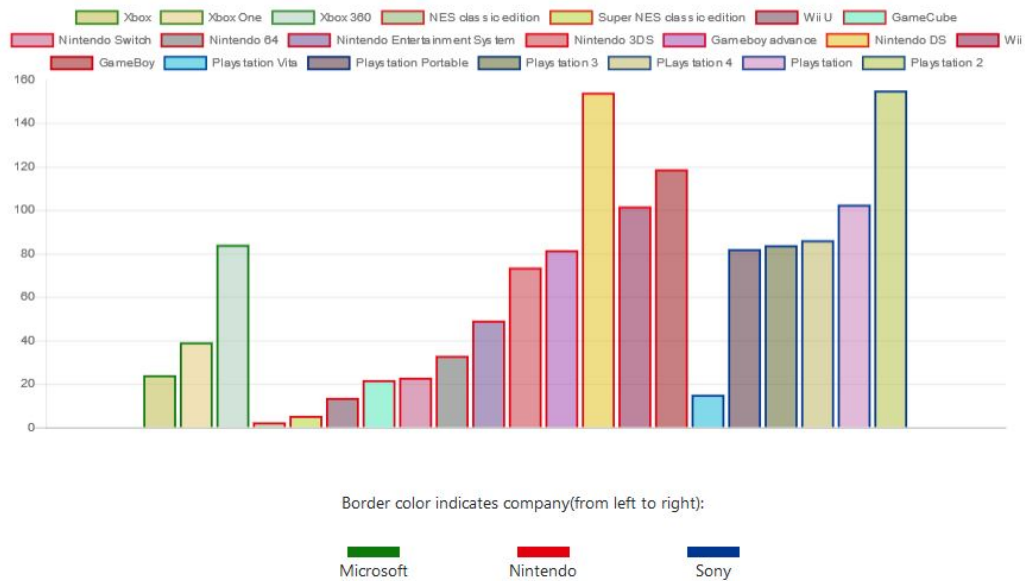
☐ Playstation Vita ☐ Playstation Portable ☐ Playstation 3 ☐ Playstation 4 ☐ Playstation ☐ Playstation 2

Here user can choose which platform(s), he/she want to make a report. Click on check boxes and hit **Submit**.

***Cheat code:** there is a button (reference of Starcraft game) to get all data from a single click.

After that, the web App will create a bar chart of the selected data. The color of the bar is randomized in other to distinguish platform name; however, the border color indicates the company is not randomized. Then a basic summary of total sales name of best selling platform and its sale number in the selected data in each respective company is queried.

Sales Chart



Basic summary from selected data:

| Firm | Total Sales (rounded) | Best-selling Platfrom | Units sold |
|-----------|-----------------------|-----------------------|------------|
| Microsoft | 147.0 | Xbox 360 | 84.0 |
| Nintendo | 677.0 | Nintendo DS | 154.02 |
| Sony | 524.0 | Playstation 2 | 155.0 |

There is a toggle to show the selected (current) data:

| | | | |
|------|-------|---------------|-------|
| Sony | 524.0 | Playstation 2 | 155.0 |
|------|-------|---------------|-------|

*Sales number in million

☐

Show/hide the current data:


| Firm | Platfrom | Units sold |
|-----------|-------------------------------|------------|
| Microsoft | Xbox | 24.0 |
| Microsoft | Xbox One | 39.1 |
| Microsoft | Xbox 360 | 84.0 |
| Nintendo | NES classic edition | 2.3 |
| Nintendo | Super NES classic edition | 5.00 |
| Nintendo | GameBoy | 1.0 |
| Nintendo | GameCube | 1.0 |
| Nintendo | Wii U | 1.0 |
| Nintendo | Wii | 1.0 |
| Nintendo | Nintendo 3DS | 1.0 |
| Nintendo | Gameboy advance | 1.0 |
| Nintendo | Nintendo 64 | 1.0 |
| Nintendo | Nintendo Entertainment System | 1.0 |
| Sony | Playstation Vita | 1.0 |
| Sony | Playstation Portable | 1.0 |

Choosing none will generate web page with graph, table of no data though.


3) Modifying database


Accessing modifying tools by clicking on **Tools** in the navigator


Insert new entry:

 Console Sales Report

[Home](#) [Make Report](#) [Tools](#) ▾

 Insert

 Update

 Delete

Firm

Platform

Units sold

Do not put blank!

Microsoft ▾

Xbox 99999

999

Insert

In the **Insert** tab, user can add new entry by choosing firm (one out of three), entering name of new platform and units sold.

Update entry:

Likewise, user can update entry in the **Update** tab

 Insert

 Update

 Delete

Platform

Units sold

Do not put blank!

Xbox 99999

99

Update

The Web App will also update the **Make Report** page with new insertion or update:

Console Sales Report

[Home](#) [Make Report](#) [Tools](#) ▾

🎮 Select Platform(s) below to make a report

☰ Nintendo

☐ NES classic edition ☐ Super NES classic edition ☐ Wii U ☐ GameCube ☐ Nintendo Switch ☐ Nintendo 64
☐ Nintendo Entertainment System ☐ Nintendo 3DS ☐ Gameboy advance ☐ Nintendo DS ☐ Wii ☐ GameBoy

☰ Microsoft

☐ Xbox ☐ Xbox One ☐ Xbox 360 ☐ Xbox 99999

☰ Sony

☐ Playstation Vita ☐ Playstation Portable ☐ Playstation 3 ☐ Playstation 4 ☐ Playstation ☐ Playstation 2

Submit

Make Strong Valid

Delete entry:

Deleting entry is simple, select the checkbox, red word will remind your current selection, then click on **delete** button.

[Insert](#)

[Update](#)

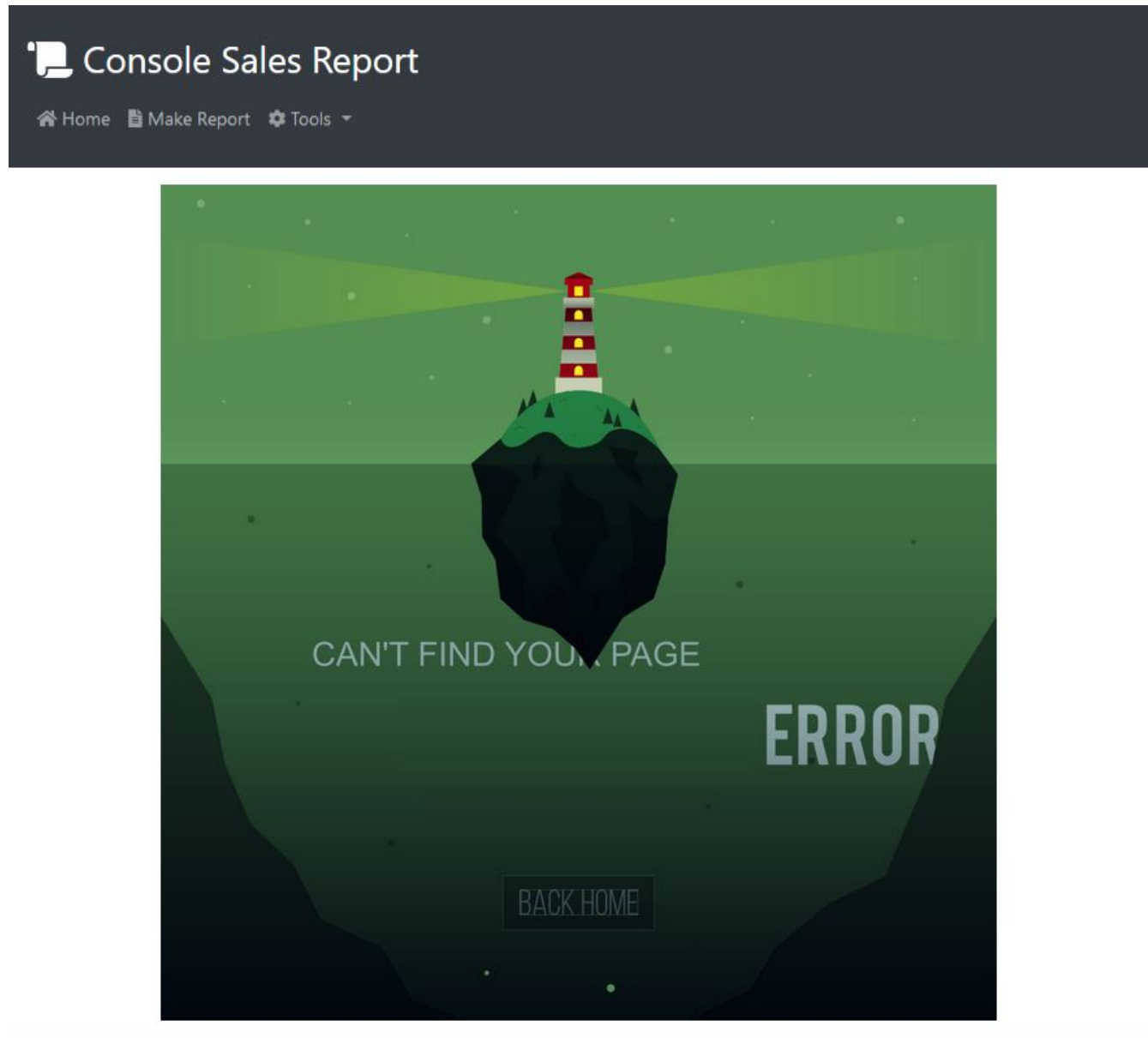
[Delete](#)

☰ Select data you want to delete

| Checkbox | Firm | Platfrom | Units sold |
|---|-----------|---------------------|------------|
| <input checked="" type="checkbox"/> checked | Microsoft | Xbox | 24.0 |
| <input type="checkbox"/> checked | Microsoft | Xbox One | 39.1 |
| <input checked="" type="checkbox"/> checked | Microsoft | Xbox 360 | 84.0 |
| <input type="checkbox"/> checked | Nintendo | NES classic edition | 2.3 |

d) Error Handling

It is highly advised for user not to navigate the website through URL, since it could have led to error 404 or error 500 when user try to access **createTable** page manually. In this case, the website will direct user to error page, click on the image to get back the **homepage**.



Appendix

Database from https://en.wikipedia.org/wiki/List_of_best-selling_game_consoles (in December 2018)

Images from freepik.com with free license .

Python framwork and library: bottle, sqlite3

JavaScript library: ChartJS, fontawesome, bootstrap 4 and its related library