



Wildlife Conservation Database Application

Data Base Management Systems (CS6106)

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Batch: MN

Wildlife Conservation Project

Explanations:

In the first file of our project , we connect to the sqlite3 database provided by python and establish a cursor. Using the cursor , we create the tables:

wildlife:To store the populations of the concerned species

cla:To store the classifications of the concerned species

invasive:To contain data about the invasive species

dreason:To contain data about the cause of death of threatened species

In the second file of our project , we import the tkinter module to create the required GUI as well as sqlite3 to connect to the .db file we made before.

Functions provided by the GUI:

1.Requests for username and password

Correct username:admin

Correct password:pass

2.The main menu , containing several options

3.Windows for viewing data, entering changes or new data

4.Confirmation boxes to save changes to the database

5.Different types of data can be viewed , like causes of death , population and classification

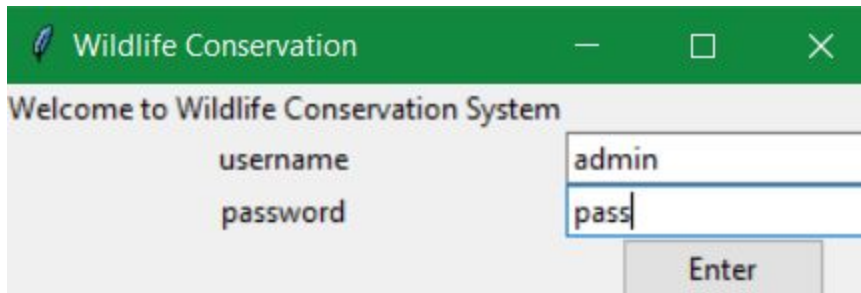
6.Data about invasive species can be viewed

7.Changes to the invasive species data

In short the application created can efficiently maintain ecological data that can provide an organisational role in conservational efforts.

Output:

1. **Login Screen** (Username: admin and Password: pass)



A screenshot of a web application window titled "Wildlife Conservation". The window has a green header bar with a feather icon, a minus sign, a square icon, and a close button. Below the header, the text "Welcome to Wildlife Conservation System" is displayed. There are two input fields: "username" with the value "admin" and "password" with the value "pass". An "Enter" button is located below the password field.

Wildlife Conservation	
Welcome to Wildlife Conservation System	
username	admin
password	pass
<input type="button" value="Enter"/>	

2. **Main Menu**



A screenshot of a web application window titled "Wildlife Cons...". The window has a green header bar with a feather icon, a minus sign, a square icon, and a close button. Below the header, the text "Wildlife Conservation" is displayed in a large, bold, green font. Below this, there is a list of menu items: "Show records", "Update records", "Insert Record", "Delete Record", "Classifications", "COD", and "Invasive Species".

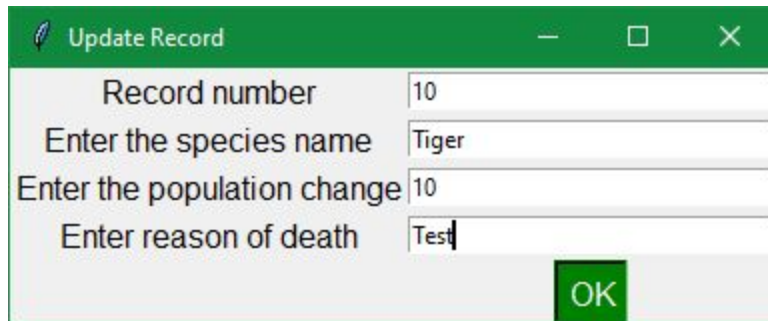
Wildlife Conservation
<i>Show records</i>
<i>Update records</i>
<i>Insert Record</i>
<i>Delete Record</i>
<i>Classifications</i>
<i>COD</i>
<i>Invasive Species</i>

3. Show all Records



4. Update Records





Update Record

Record number: 10

Enter the species name: Tiger

Enter the population change: 10

Enter reason of death: Test

OK



(1, 'Polar Bear', 20000)
 (2, 'Panda', 2000)
 (3, 'Cheetah', 10000)
 (4, 'Dolphin', 1000)
 (5, 'Elephant', 50000)
 (6, 'Leopard', 7000)
 (7, 'Lion', 50000)
 (8, 'Orangutan', 7000)
 (9, 'Rhinoceros', 20000)
 (10, 'Tiger', 3490)

Records after updation

5. Insert Record



Wildlife Cons...

Wildlife Conservation

Show records

Update records

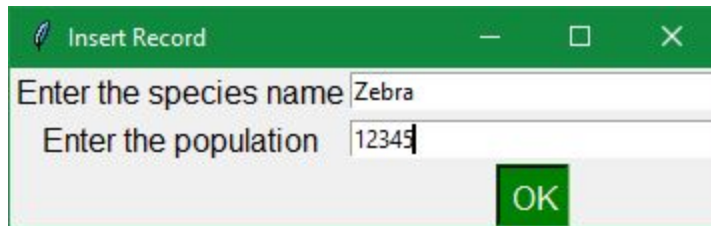
Insert Record

Delete Record

Classifications

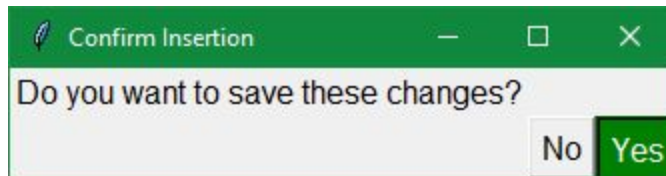
COD

Invasive Species



A dialog box titled "Insert Record" with a green header bar. It contains two text input fields: "Enter the species name" with the value "Zebra" and "Enter the population" with the value "12345". An "OK" button is located at the bottom right.

Confirmation of Insertion



A dialog box titled "Confirm Insertion" with a green header bar. It contains the text "Do you want to save these changes?" and two buttons: "No" and "Yes". The "Yes" button is highlighted in green.

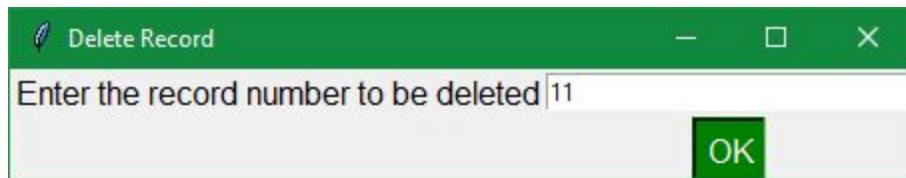


A window displaying a list of records. The records are numbered 1 through 11, each followed by the species name and population count in parentheses. The list is as follows:

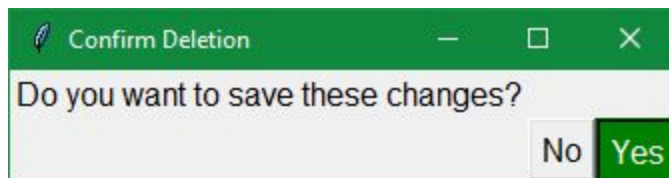
- (1, 'Polar Bear', 20000)
- (2, 'Panda', 2000)
- (3, 'Cheetah', 10000)
- (4, 'Dolphin', 1000)
- (5, 'Elephant', 50000)
- (6, 'Leopard', 7000)
- (7, 'Lion', 50000)
- (8, 'Orangutan', 7000)
- (9, 'Rhinoceros', 20000)
- (10, 'Tiger', 3490)
- (11, 'Zebra', 12345)

Records after Insertion

6. Delete a Record



Confirmation of Deletion





(1, 'Polar Bear', 20000)
(2, 'Panda', 2000)
(3, 'Cheetah', 10000)
(4, 'Dolphin', 1000)
(5, 'Elephant', 50000)
(6, 'Leopard', 7000)
(7, 'Lion', 50000)
(8, 'Orangutan', 7000)
(9, 'Rhinoceros', 20000)
(10, 'Tiger', 3490)

Records after Deletion

7. Classifications



Wildlife Conservation
Show records
Update records
Insert Record
Delete Record
Classifications
COD
Invasive Species

All Classifications

Classifications
All
Threatened
Endangered
Critically Endangered

All Classific...
('Polar Bear', 'Threatened')
('Panda', 'Endangered')
('Cheetah', 'Threatened')
('Dolphin', 'Critically Endangered')
('Elephant', 'Threatened')
('Leopard', 'Threatened')
('Lion', 'Threatened')
('Orangutan', 'Threatened')
('Rhinoceros', 'Threatened')
('Tiger', 'Endangered')
('Zebra', 'Threatened')

Threatened Classifications

Classifications
All
Threatened
Endangered
Critically Endangered

Thr...
('Polar Bear', 'Threatened')
('Cheetah', 'Threatened')
('Elephant', 'Threatened')
('Leopard', 'Threatened')
('Lion', 'Threatened')
('Orangutan', 'Threatened')
('Rhinoceros', 'Threatened')
('Zebra', 'Threatened')

Endangered Classifications

Classifications
All
Threatened
Endangered
Critically Endangered

('Panda', 'Endangered')
('Tiger', 'Endangered')

Critically Endangered Classifications

Classifications
All
Threatened
Endangered
Critically Endangered

Critically E...
('Dolphin', 'Critically Endangered')

8. Cause of Death (COD)

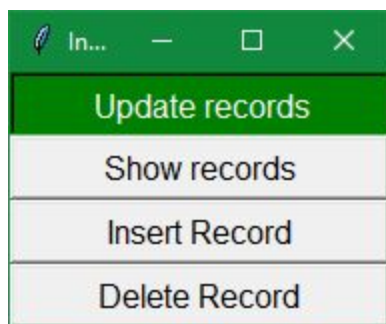
Wildlife Cons...
Wildlife Conservation
Show records
Update records
Insert Record
Delete Record
Classifications
COD
Invasive Species

('Tiger', 3490, 'Test')

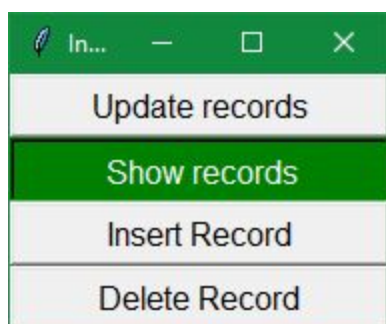
9. Invasive Species



10. Updating Invasive species data



A screenshot of the 'Update Record' dialog box. It contains three input fields: 'Record number' with the value '1', 'Enter the species name' with the value 'fox', and 'Enter the population change' with the value '123'. There is an 'OK' button at the bottom right.

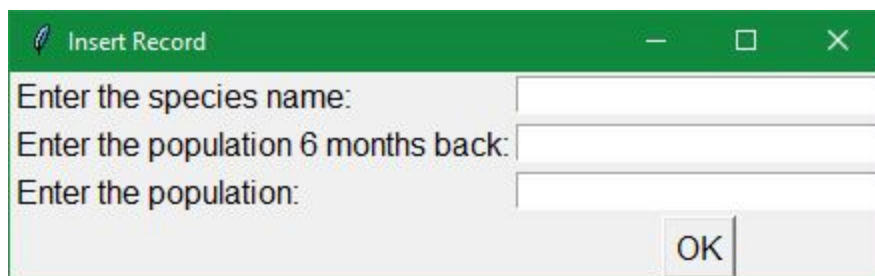
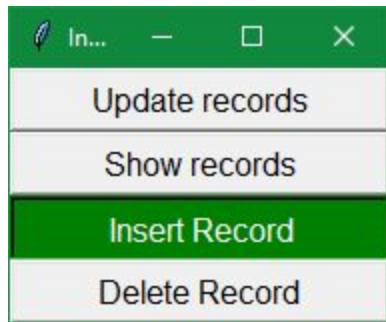


A screenshot of the 'Records after Update' window. It displays a list of records in the following format:

```
(1, 'fox', 500, 623)
(2, 'locust', 20000, 34000)
(3, 'Monitor', 200, 250)
(4, 'dormice', 1000, 3000)
```

Records after Update

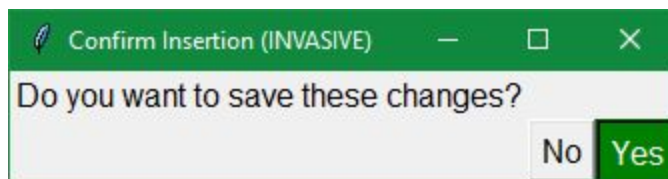
11. Inserting invasive species data



A screenshot of the 'Insert Record' dialog box. It has a green title bar with a feather icon and the text 'Insert Record'. The dialog contains three text input fields with labels: 'Enter the species name:', 'Enter the population 6 months back:', and 'Enter the population:'. An 'OK' button is located at the bottom right.

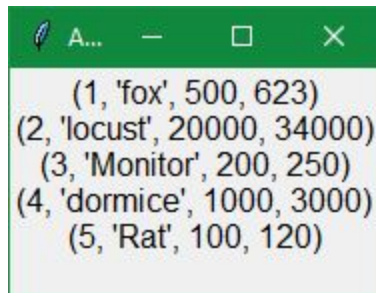


A screenshot of the 'Insert Record' dialog box. The 'species name' field contains the text 'Rat', the 'population 6 months back' field contains '100', and the 'population' field contains '120'. The 'OK' button is highlighted with a green background.



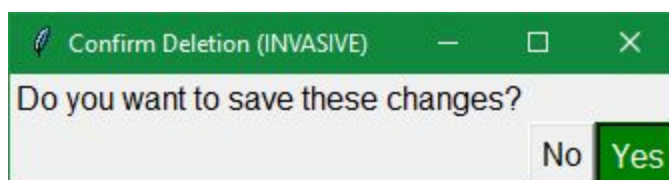
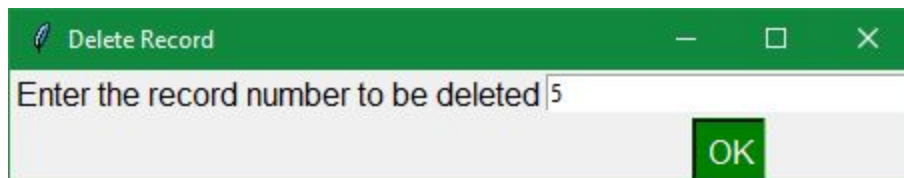
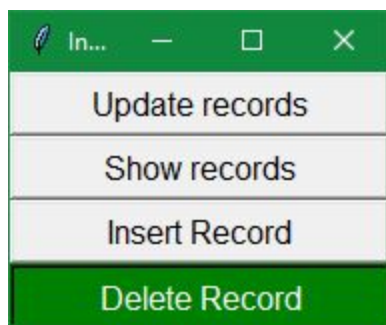
A screenshot of the 'Confirm Insertion (INVASIVE)' dialog box. It has a green title bar with a feather icon and the text 'Confirm Insertion (INVASIVE)'. The dialog contains the question 'Do you want to save these changes?' and two buttons: 'No' and 'Yes' (which is highlighted with a green background).

Confirmation of Insertion of invasive specieses



Records after Insertion

12. **Deleting** invasive species data



Confirmation of Deletion of invasive species