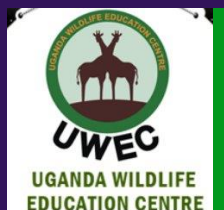




# CHEETRACK

[www.zoohackathon.ronzag.com](http://www.zoohackathon.ronzag.com)

A web and mobile ready solution that identifies and tracks cheetahs in captivity in a bid to combat illegal wildlife trafficking



<ZOOHACKATHON>  
*END LOOP: Coding to end wildlife trafficking*

ASSOCIATION  
OF ZOOS &  
AQUARIUMS



CONSERVATION X LABS

# Team CheeTrack



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Name	Role	Email	Phone	URL
Lutaaya Shafiq	Developer /AdWords Strategist	info@ronzag.com	+256702772721	zoohackathon.ronzag.com
Marvin Alinaitwe	UX / UI Designer	malinaitwe10@gmail.com	+256706860763	zoohackathon.ronzag.com
Princess Kamaliza	Wildlife Conservationist	rkamaliza@uwec.ug	+256784147027	zoohackathon.ronzag.com
Anthony Kagoro	Wildlife Conservationist	anthony.kagoro@gmail.com	+256772640228	zoohackathon.ronzag.com
Habib Sentongo	Telematics / Developer	habibsentongo@gmail.com	+256752401173	zoohackathon.ronzag.com
Shamirah Nantale	Material Design Specialist	shamirah280@gmail.com	+256702946717	zoohackathon.ronzag.com
Phillip	Wildlife Conservation	philkat33@gmail.com	+256703321184	zoohackathon.ronzag.com
Econ Roy	Conservationist	econroy1994@gmail.com	+256784827313	zoohackathon.ronzag.com
Richard Bagyenya	Conservationist	richard@ctph.org	+256700720997	zoohackathon.ronzag.com
Julius K Kasigwa	Conservationist	juliuskasigwa@gmail.com	+256772453595	Zoohackathon.ronzag.com



# Problem Statement

More than three hundred Cheetahs are illegally traded annually around the world especially in the Horn of Africa to the Gulf States.

In Numbers:

300 cheetah trafficked  
annually



# Why the Cheetah

- Highly endangered.
- High monetary value in the pet-trade.
- Prestige and high social status to own as a pet.
- Highly Sensitive and difficult to keep in captivity.



# The Digital Solution: CheeTrack

- ❑ Use Artificial Intelligence, Machine Learning ,and API's technology to monitor Cheetahs both in legal and non-legal captivity in order to enhance the DNA data-bases already in use.
- ❑ Enable easy monitoring of on-line trade in cyber-market place and social media.



# Why Artificial Intelligence, Machine Learning and API's

- ❑ Enable real time tracking hence reducing on the cumbersome processes of extensive paperwork and expensive highly technical scientific procedures.
- ❑ complimenting DNA data- compiled with more in-put sources like individual marker of the animals from photography and video technology.
- ❑ Mobile application which is easy to use any where and by anybody hence reducing on exposure to danger and time spent on collecting samples for identification- (reducing on need for special skills).
- ❑ Enable to track animals in the wild and non-legal captive centers in order to compile a data base for identification.



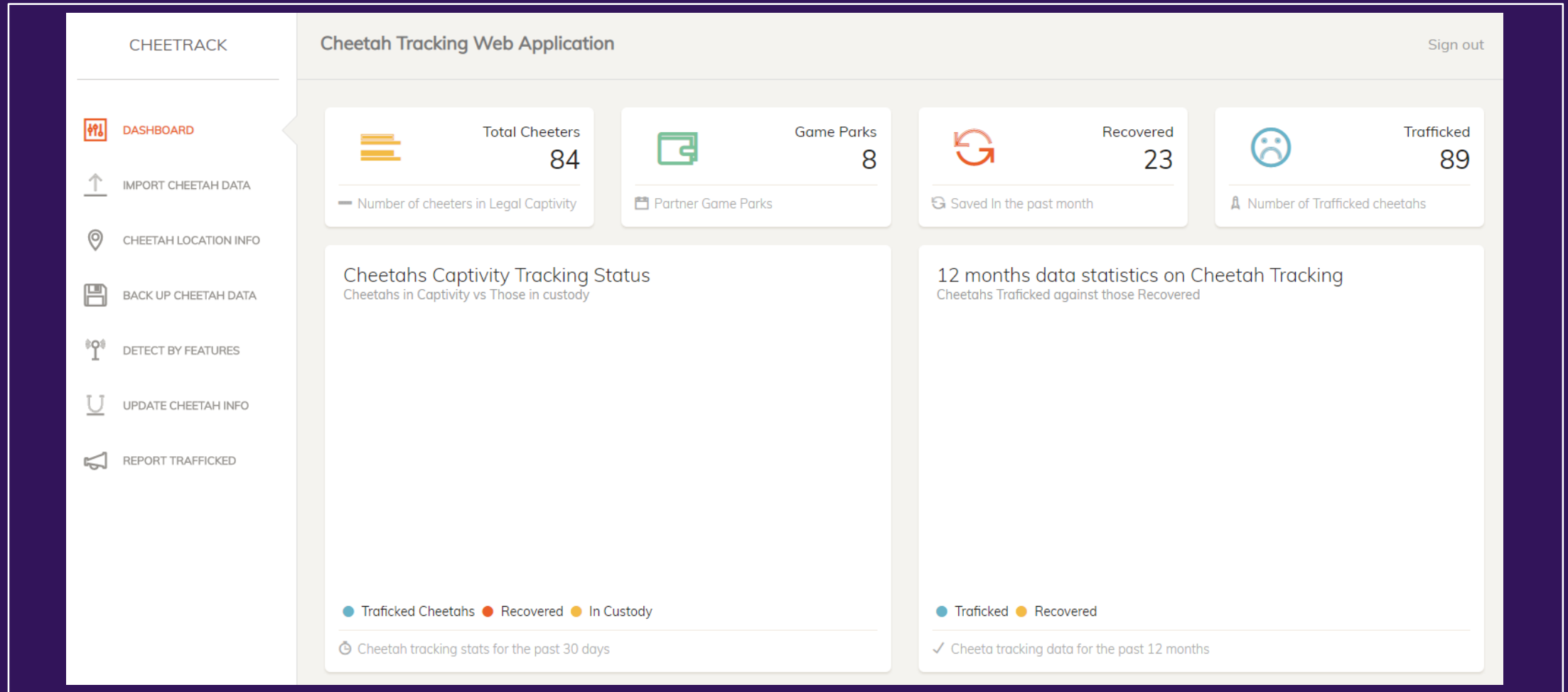
# Proposed Financing

- ❑ Funding from Coalition Against wildlife Trade (CAWT) which is a Private Public Partnership.
- ❑ Cheetah Conservation Fund (CCF) which has a long track record on fighting illegal trade in Cheetah pet-trade and is developing a DNA data-base.

# Demo 1: Tracking Dashboard with statistics on Cheetahs in Africa



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The software helps the user visualize the statistics of the data on cheetahs being tracked in form of graphs, pie charts and line graphs.

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# Demo 2: Tracking cheetahs using GPS technology



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CHEETRACK

DASHBOARD

IMPORT CHEETAH DATA

CHEETAH LOCATION INFO

BACK UP CHEETAH DATA

DETECT BY FEATURES

UPDATE CHEETAH INFO

REPORT TRACKED

Track Cheetah Location

Start by entering the Cheetah Tracking Number ( Tracking ID)

Steps to track cheetah.

1. Insert Cheetah Tracking Number

2. Click the Search button

3. Locate the Cheetah on the Map below

Enter Cheetah Tracking ID

Search Cheetah Database

Uganda Wildlife Conservation ...

Entebbe

4.2 ★★★★★ 561 reviews

View larger map

Directions

Save

Johnston Rd

The Marina

Wild Discoveries Safaris Uganda

Uganda Wildlife Conservation... Zoo park with kid...

Joint Ethnobotanical Research and Advocacy

Johnston Rd


Johnston Rd

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UGX 21,096

4.9 ★★★★★ 64 Orders


Shipping: UGX 9,731



UGX 40,900


4.8 ★★★★★ 44 Orders

Shipping: UGX 9,731



UGX 51,999

4.9 ★★★★★ 146 Orders



UGX 18,816

4.9 ★★★★★ 71 Orders

We use the Google Maps APIs with GPS Tracking to track the cheetahs in real time

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# Demo 3: Machine Learning Algorithm to identify individual cheetah




Identify Individual Cheetah with Machine Learning  
Artificial Intelligence tool to identify cheaters

This tool uses data sets from a very big database of images of cheetahs that has been previously fed into the system. If you have an image of a cheater which may be one of the following file types: .JPG, .PNG, .GIF, .JPEG, .PDF, .XLS, (preferably .JPG), browse below and select the image of the Cheetah so the system will identify which Cheetah it is and return the Cheeta Tracking ID, Cheetah Name, Conservation Status and history

IDENTIFYING FEATURES Tool should have some way of identifying an individual from data entries (which may be in many formats; see "Allow Import of Data..." Things to consider). This function will allow the individual to be identified, and for new data inputs to be ID'd as a specific individual within a degree of certainty

Select File Type



Shafiq Lutaaya Marvin Alinaitwe

Shamira Habib Anthony Phillip Princess

A life history for an individual cheetah can be created with input from several sources especially image data sets with artificial intelligence



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Using digital tools to combat illegal cheetah trafficking

The End