

# AZURE WOMEN'S HACKATHON'22 IDEA SUBMISSION

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# PROBLEM STATEMENT

Finding missing people using face recognition

# EVERY HOUR, AN AVERAGE OF 12 CHILDREN GO MISSING ACROSS INDIA.

NGO's estimate that between **12,000** and **50,000** **women** and **children** are **trafficked** into the country annually from neighbouring nations as a part of the sex trade.

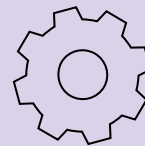
Millions are trapped in a lucrative economy of **forced labour, domestic slavery, and sex work.**

Despite this, it rarely makes the news, and there is little public indignation or political resolve to put a stop to it.



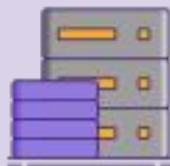


# TECH STACK



## BOOTSTRAP

A free and open-source framework of HTML, CSS and JavaScript, directed at responsive, mobile-first front-end web development.



## DJANGO

A free and open-source, high-level Python based web framework that enables rapid development of secure and maintainable websites.

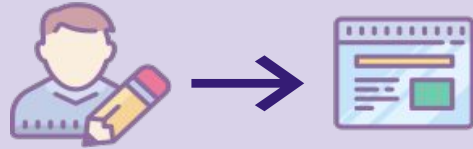


## AZURE FACE API

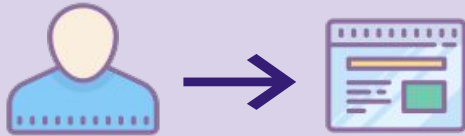
An AI service by Microsoft that can detect, identify and analyse faces in images and videos.



# BUSINESS ARCHITECTURE



A Relative / Guardian registers a missing person.



A volunteer reports a suspected missing person.



Admin verifies / conducts background check.

Unique **FaceID** generated and stored in DB.



FaceID generated and API tries to find similar face with List of missing person FaceIDs

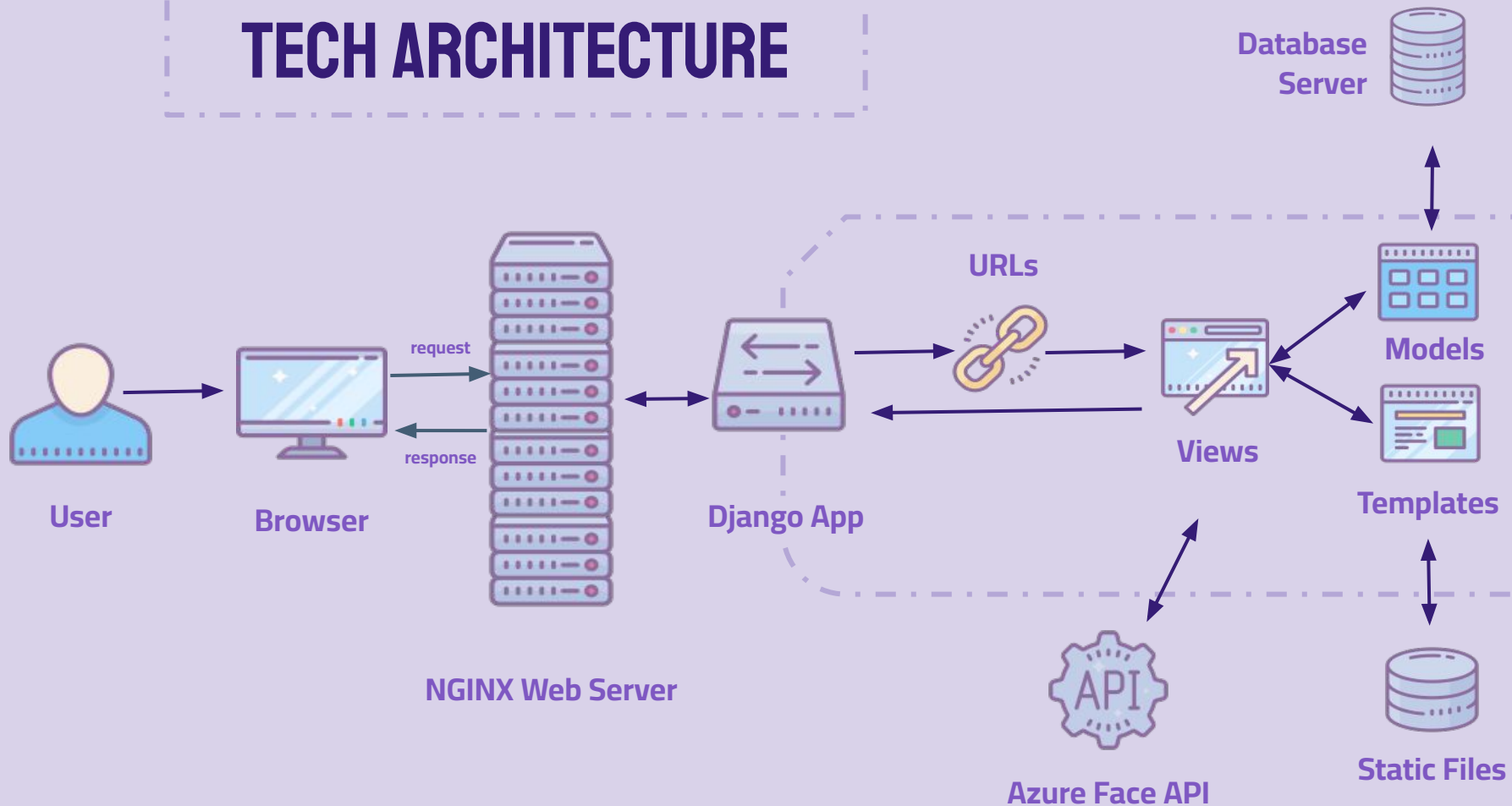
Family and local authorities are **contacted**.




**Match found!**

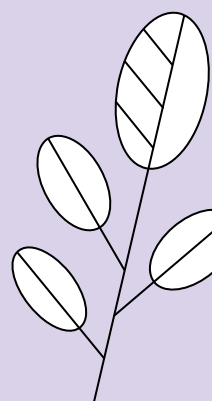
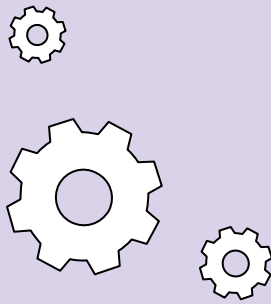
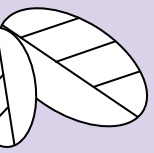


# TECH ARCHITECTURE





# PROJECT DEMO

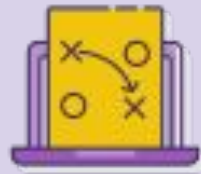




# LESSONS LEARNT

## FINDING A PROBLEM TO SOLVE

Researching, finding a problem that resonates with you.



## AZURE API

Experimenting with computer vision APIs etc

## BUILDING AN MVP

Choosing an appropriate framework for rapid prototyping.



## CODING AND DOCUMENTATION

Writing clean and clear code, documenting code, making a github README file and so on.





## NEXT STEPS

### PLUGINS

Add more features such as,

- SMS verification
- Geo location from IP address while reporting
  - PersonGroup, LargePersonGroup in Face API

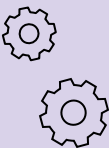
### DEPLOYMENT

So far only production covered, future plans include

- Deploying the site
- Sanitize traffic to prevent API throttling.

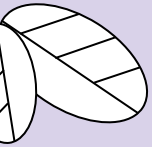
### ADMINS & SPONSORS

- Admins and Volunteers to verify, conduct background checks
- Funding for hosting, API, etc





# THANK YOU!



Illustrations by [Storyset](#)  
Icons by [icons8](#)

