Project Plan

ML Project on Drowsiness & Alcohol Detection



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Problem
Statement

A ML Algorithm to test the sleepiness of the driver and alcohol testing from the sensors deployed on the dashboard/sterring wheel of car.



About the Project

OBJECTIVES

- 21 percent of all fatal accidents are due to drowsy driving. 60 percent of adult drivers or about 168 million people have driven a vehicle while feeling drowsy in the past year. About 37 percent or 103 million people have fallen asleep at the wheel, according to the National Sleep Foundation's [NSF] 2005 poll.
- In order to prevent this, we provide this model & solution

LIBRARIES IN USE

- Matplotlib
- Numpy
- Pandas
- TensorFlow
- OpenCV



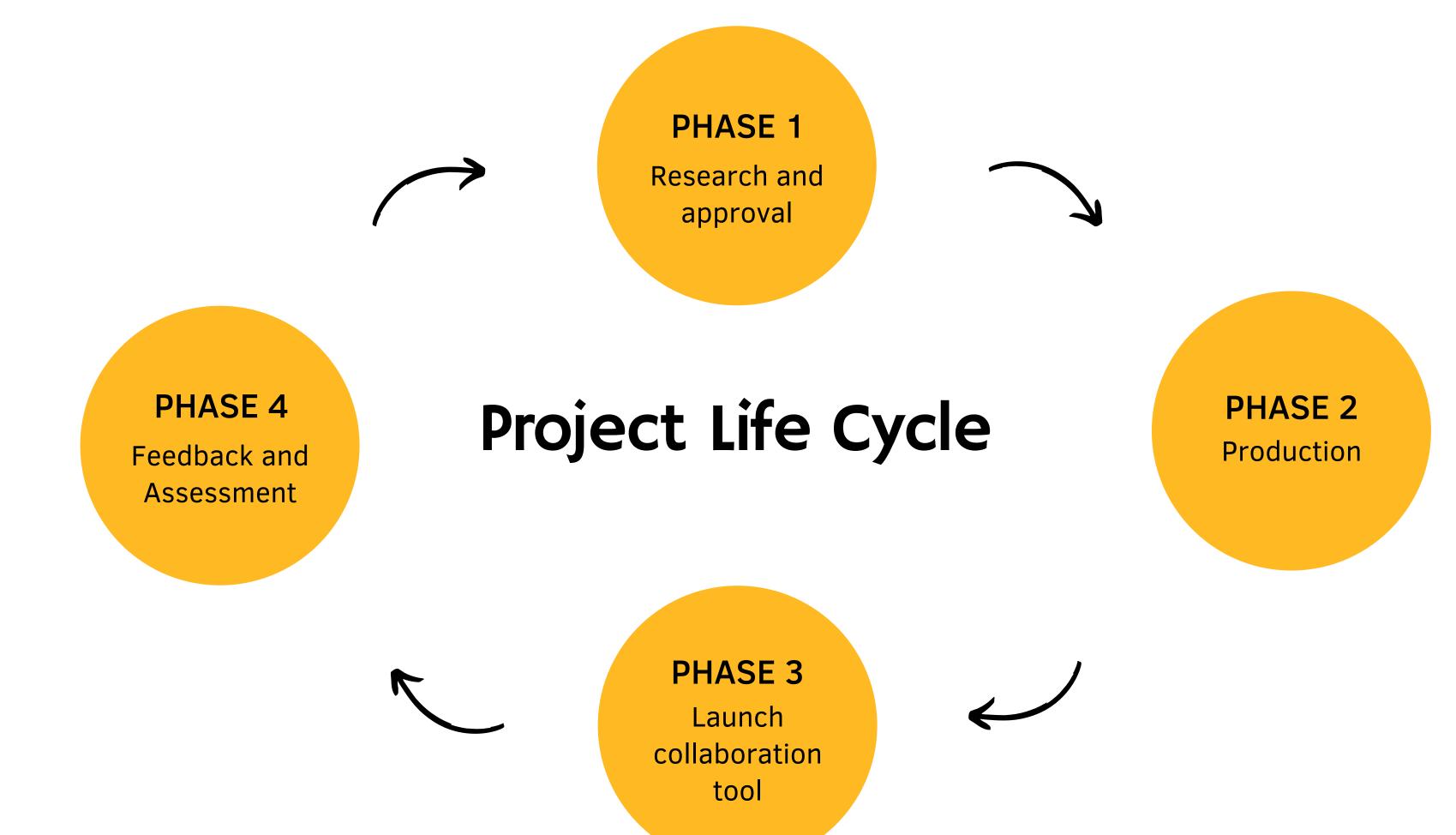
Project Timeline

1 RESEARCH AND PRODUCTION

USER-TESTING THE COLLABORATION FEATURE

2 CODING THE COLLABORATION FEATURE (ONGOING PHASE)

LAUNCHING THE COLLABORATION FEATURE







Dataset size ?

As of now, there are over 9000 images dataset.



The subdomains that we have, so do we need to make a physical device or software device work too? (tinkercad)



Timeline for the collaboration project

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Planning

Research

Documentation

Prototype Production

Testing

Month 1	Month 2	Month 3	Month 4

Resource Page

- 1. Database
- 2. OpenCV Research Paper
- 3. TensorFlow Research Paper
- 4. Alcohol Detection sensors (MQ3)
- 5. TinkerCad
- 6. ---- sensor which measures the force









References Links:

https://www.sciencedirect.com/science/article/pii/S1877050918304137

https://ieeexplore.ieee.org/abstract/document/8293771

 $https://d1wqtxts1xzle7.cloudfront.net/44252386/538-1472-1-PB-with-cover-page-v2.pdf? \\ Expires=1650043478\&Signature=S\sim h2fpBmtJpgvb12Be0VC-$

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> Meet the Team Members



RAMNEEK KALRA Project Mentor



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AMAN SAINI



AAKANSHA PRIYA



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Thank you!