PSIT
Kanpur

AKASHIC

Team Id: 22_AIML_2A_20

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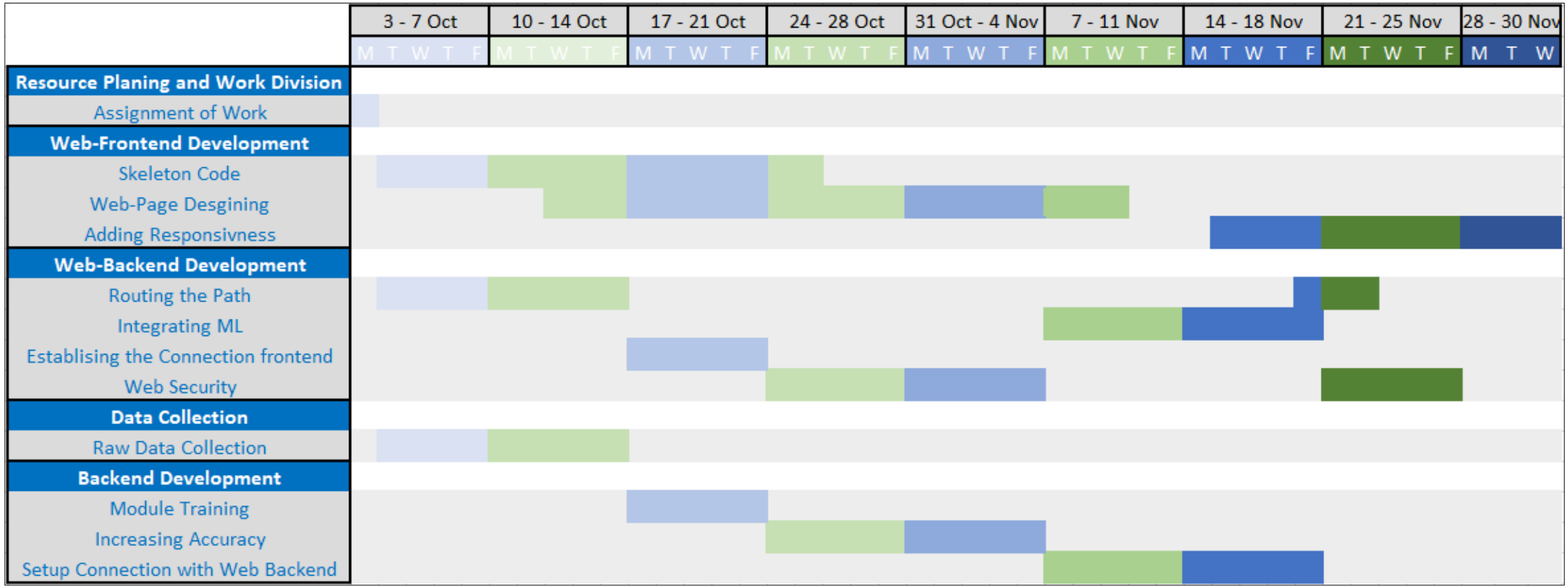
Project Objectives

- Provide Secure and easy way to login
- Resolve the issue of remembering hectic password
- Provide Unhackable, ML based login system
- Used high end ML algorithm to protect the user’s panel from being log in by unauthorized person

Feasibility Study

- ML based system with minimal chances of log in failure and data breached
- Interactive UI and compatible with all frame devices
- High accuracy will be obtained as per the data made and used to train the machine
- Project work is divided into multiple milestones and the task are assigned to the team members
- Project doesn’t violate any copyright and doesn’t intend to harm any individual or organization

Feasibility Study



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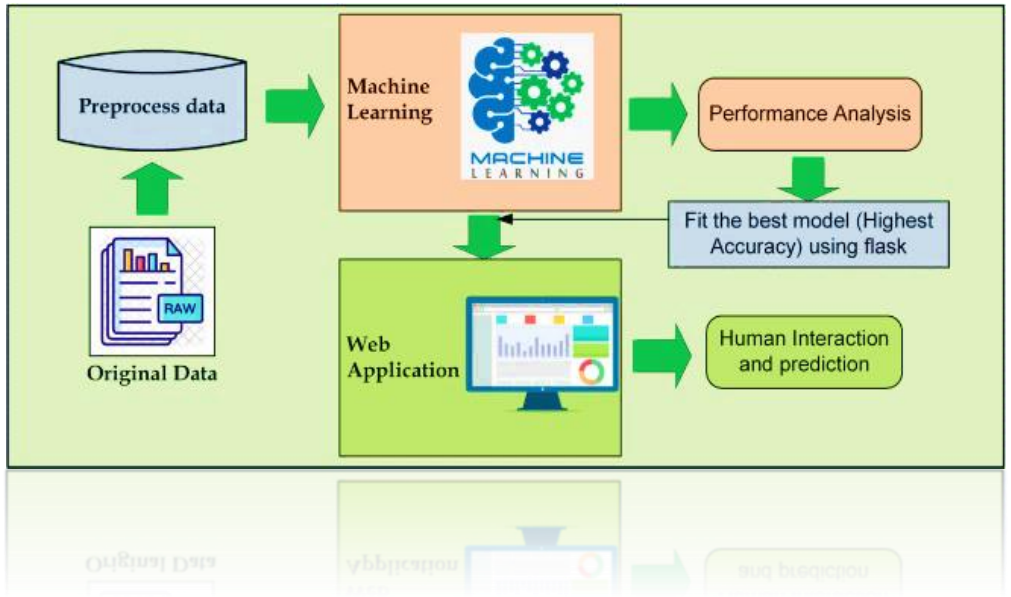
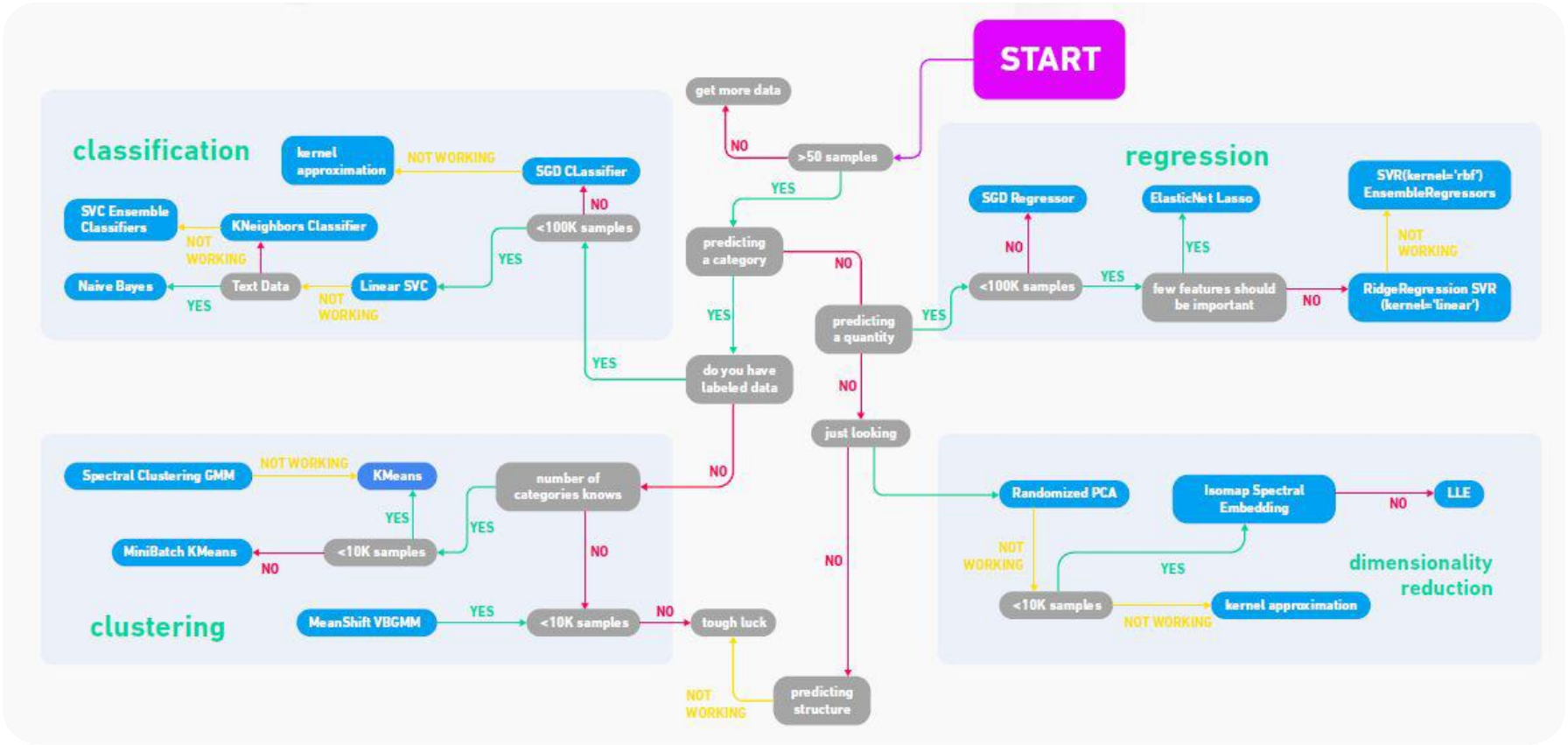
Methodology Of Work

- Dataset collection
- Data Pre-Processing
- Design and implementation of classification model
- Feature selection
- Splitting of data
- Scaling and Normalization
- Machine learning classifier



Methodology Of Work



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Tools and Technology Required

Hardware

- Camera
- A stable internet connection
- CPU - Intel Core i5 6th Generation processor or higher or an AMD equivalent
- GPU - NVIDIA GeForce GTX 960 or higher
- O S - Ubuntu or Microsoft Windows 10 or higher is recommended
- SSD
- RAM — 8 GB minimum, 16 GB or higher is recommended

Software

- Python 3.10.7
- NodeJS 18.9.0
- Anaconda
- CUDA Toolkit & cuDNN
- VPS
- OpenCV
- Database
- Cryptography
- TensorFlow, Keras, Pandas

Role Of Team Members

- **Ayush Agnihotri** - ML login system, ERP backend, Data collection / College webpage backend
- **Anish Singh** - College Webpage design
- **Abhraneel Singh** – Login and ERP webpage designing
- **Ashutosh Pandey** – Routing path and maintaining webpage source

Reference

- Face Recognition Module "**Darpan**" by Ayush Agnihotri.
  - "Portrait Depth API: Turning a Single Image into a 3D Photo with TensorFlow.js", by Ruofei Du, Yinda Zhang, Ahmed Sabie, Jason Mayes, Google on May 10, 2022
  - "Body Segmentation with MediaPipe and TensorFlow.js", by Ivan Grishchenko, Valentin Bazarevsky, Ahmed Sabie, Jason Mayes, Google, on January 31, 2022
  - "Preparing Your Dataset for Machine Learning" on March, 2021

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Thank You

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