



Data Collection and Preprocessing Phase

| Date | 15 March 2024 |
|---------------|--|
| Team ID | SWTID1720418653 |
| Project Title | Crystal Clear Vision: Revolutionizing Cataract Prediction through Transfer Learning Mastery |
| Maximum Marks | 2 Marks |

Data Collection Plan & Raw Data Sources Identification Template

Elevate your data strategy with the Data Collection plan and the Raw Data Sources report, ensuring meticulous data curation and integrity for informed decision-making in every analysis and decision-making endeavor.

Data Collection Plan Template

| Section | Description |
|-----------------------------|---|
| Project Overview | Create a highly accurate Deep Learning model with Transfer Learning to identify cataracts based on fundus images. This would allow for early diagnosis and better patient outcomes from prompt and efficient treatment. |
| Data Collection Plan | We have taken data from our mentor provided data on Skill Wallet platform. For testing purpose we have taken a dataset from Kaggle. |
| | Kaggle Dataset: |
| | https://www.kaggle.com/datasets/kershrita/cataract |
| Raw Data Sources Identified | This dataset comprises 672 annotated images categorized into two classes: cataract and normal. Each image has undergone preprocessing and augmentation to enhance its suitability for machine learning tasks |





Skill Wallet Dataset:

https://www.kaggle.com/datasets/hemooredaoo/cataract

This dataset comprises 1100 annotated images categorized into train and test directories each directory has both cataract and normal images.

Raw Data Sources Template

| Source Name | Description | Location/URL | Format | Size | Access Permissions |
|----------------|--|--|--------|-----------|-----------------------|
| Dataset 1 | This dataset comprises 672 annotated images categorized into two classes: cataract and normal. Each image has undergone preprocessing and augmentation to enhance its suitability for machine learning tasks | https://www.kagg le.com/datasets/k ershrita/cataract | Image | 200 MB | Public |





| Dataset 2 | This dataset | | | | |
|-----------|------------------------|-------------------|-------|-----------|--------|
| | comprises 1100 | | | | |
| | annotated images | https://www.kaggl | | | |
| | categorized into train | e.com/datasets/he | Image | 570 MB | Public |
| | and test directories | mooredaoo/catara | | | |
| | each directory has | <u>ct</u> | | | |
| | both cataract and | | | | |
| | normal images. | | | | |
| | | | | | |