Introduction

This document provides a technical overview of the Decision App project. For a general description and additional information about the project, please refers the following document: https://docs.google.com/document/d/1m_3SKNWvL6RERObBukN5rS70Xp-1zkin12SmwUvWvM/edit#heading=h.swmubhsz6gsj

Implementation:

The project consists of three primary components: UI design, algorithms, and database.

The UI design part uses web programming languages such as HTML, CSS, and JavaScript to develop pages and handle user interaction. The PHP Laravel framework manages the model and gives a grand view for controllers. It utilizes the post method through API to obtain the required information. Assuming you are already acquainted with HTML, CSS, and JavaScript as a developer, you can refer to this document to begin with PHPLaravel.
https://docs.google.com/document/d/1G6mtfgmG5zRr-MdlSoJX8RBOXw0QWUb2loZtxNatwKI/edit
The general look of web pages:
https://drive.google.com/drive/u/0/folders/0AGc0kuuymzhQUk9PVA

The algorithms are used to merge and divide students based on their traits. More detailed description and pseudocode are provided:

Refers to this page about the Cluster-Gender Algorithm:
https://docs.google.com/document/d/1KmA6voHYKgHTg3F6VCxP4Sw_acpsCpaRfpEn3wRbt4o/edit

Refers to this page about the Balance-Grade Algorithm:
https://docs.google.com/document/d/1QwxruceLAJOFgDpJiMv5d_6Kxp8sLZt_wQ2TnAgXcR4/edit

Refers to this page about the Aggregation Algorithm:
https://docs.google.com/document/d/1VwUSEN9f6w-9evQd0IdnzaDTqlTTNyx_rDynHmd4TCs/edit