

Milestone project 2: Single page application analysing data using D3

Page heading: SLYNE ACADEMY EXAM RESULT ANALYSIS JUNE 2018

Extreme left hand side of top row: Selector to work on bar chart and select pupils by cohort, showing how many pupils there are in each cohort.

Top row: three charts

- Chart 1 – bar chart showing the total number of pupils who sat exams.
- Chart 2 – stacked bar chart showing the number of pupils in each gender who got grades 1 to 9 in English.
- Chart 3 – stacked bar chart showing the number of pupils in each gender who got grades 1 to 9 in Maths.

Next row: Scatter diagram showing any correlation between English grade achieved and age.

Comments written underneath about correlation.

Each dot coloured blue or pink to represent male or female student.

User can click on each dot to get initials of each student.

Next row: Scatter diagram showing any correlation between Maths grade achieved and attendance.

Comments written underneath about correlation.

Each dot coloured blue or pink to represent male or female student.

User can click on each dot to get initials of each student.

Final part of page:

Table of data showing all pupils grades and scores.

User can go through cells to examine data.

Each cell changes colour to pale blue when selected.

Wireframe below shows how single page application is to be set up.

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Cohort selector enables data for each cohort to be viewed in each graph on the page.

Cohort selector moves down page with graphs as needed.

Bar chart showing number of males and females taking exams

Stacked bar graph for English achievement showing percentage of pupils achieving each grade from 1 -9

Stacked bar graph for Maths achievement showing percentage of pupils achieving each grade from 1 -9

Relevant comments added on each graph

Scatter diagram showing correlation between English grade and age when exam was taken – expecting to find negative correlation.

Blue dot for boys, pink dot for girls, hovering on dot reveals initials of students.

Relevant comment added on correlation between English grade and age when exam was taken.

Scatter diagram showing correlation between Maths grade and attendance. Expecting to find positive correlation.

Relevant comment added on correlation between Maths grade and attendance.

Stacked bar charts for all other subjects.

Table of data for all students showing their achievement in all subjects.