Dave Ltd provisions customers with telecommunication services.  When provisioning a service, it’s important to enable a customer at the nearest exchange. To do this, Dave must calculate the nearest exchange to the customer. Once done, customer is considered connected.

•      Consider mapping the customer and two exchanges on a 2d grid.

•      For the purpose of this project, the customer is assumed to be at co-ordinate (0,0).

•      (0,0) co-ordinate is fix top-left of the grid.

Inputs

•      The grid XY axis must be >=0 and <=20

•      The exchanges 1 & 2, are to be represented using co-ordinates X,Y and the exchange’s id .

•      The exchange Id conforms to the pattern ‘ex:[0-9]:[0-9]’ . No two exchange have the same references

Output

•      Show which exchange id is closest to the customer.

Your Tasks

•      BA/s to share briefing with SD team

•      Team to provide an estimation of how much time it will take to perform design, build and test phases.

•      Team to present estimation

•      Team to present propose solution

•      Build solution

•      Test solution

•      For clarifications, feel free to contact C---- B---, I--- and V---.

Change Requests

CR1: We must now allow for the grid to be >20 for both X and Y axis.  The new max for X/Y is 100k

CR2: Extend the number of exchanges from 2 to 99.  The input must have at least 2 exchanges, but no more than 10. All exchange ids must be unique.

CR3: Visually represent the grid, the customer and the exchanges. The cells with the exchanges must show the distance from the customer and the id of the exchange.