Front End

Cost and Time for each Route

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Route Selection | Option 1 | | Option 2 | |
|  | Cost | Time | Cost | Time |
| A->B | 20 | 1 Day | 7 | 3 Days |
| B->C | 12 | 5 Days | 6 | 12 Days |
| C->D | 18 | 21 Days | 80 | 2 Days |
| D->E | 11 | 4 Days | 9 | 8 Days |
| E->F | 18 | 1 Day | 8 | 3 Days |

Put the above data in a table in the front end.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Route Selection** | **Choose Option** |  | |  | | |
|  | |  | | |
| A->B | Option 1 | | This is a dropdown list. User selects either option 1 or option 2 from it. | | |
| B->C | Option 2 | |  | |
| C->D | Option 1 | |  | |
| D->E | Option 2 | |  | |
| E->F | Option 1 | |  | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Create a Button called “Calculate” | | | | | |  | | |
| Once the user selects the options in each route selection and clicks the “Calculate” button, perform the backend calculation and displays in with the message “Your Scorecard” and result next to it. | | | | | | | | | |
| "Your Scorecared: \_\_\_\_"  Backend | | | |
| Route Selection | | Option 1 | | | Option 2 | | | |
|  | | | Cost(C) | Time(T) | | Cost(C) | | Time(T) |
| A->B | | | 20 = (C1) | 1 Day= (T1) | | 7 =(C1) | | 3 Days =(T1) |
| B->C | | | 12 =(C2) | 5 Days=(T2) | | 6 =(C2) | | 12 Days =(T2) |
| C->D | | | 18 =(C3) | 21 Days=(T3) | | 80 =(C3) | | 2 Days =(T3) |
| D->E | | | 11 =(C4) | 4 Days=(T4) | | 9 =(C4) | | 8 Days =(T4) |
| E->F | | | 18 =(C5) | 1 Day=(T5) | | 8 =(C5) | | 3 Days =(T5) |

Based on the selection made by the user i.e. either option 1 or 2. Do the below calculation.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Route Selection | Cost | Time |  | |
| A->B | C1 | T1 |  | |
| B->C | C2 | T2 |  | |
| C->D | C3 | T3 |  | |
| D->E | C4 | T4 |  | |
| E->F | C5 | T5 |  | |
|  | Total Cost = C1+C2+C3+C4+C5 | Total Time = T1+T2+T3+T4+T5 |  | |
|  |  |  |  | |
| To calculate total score: | |  |  | |
| Total Score = (Total Cost \* 0.9 + Total Time \* 0.1) – This is how result is calculated in the backend and displayed next to “Your Scorecard” in the frontend. | | | |
|  | | | |