

Student Data Dashboard – Complete Guide (Tableau Public Web)

Dataset

Create a Google Sheet with these columns:

| Student | Reg No | Tamil | English | Maths | Science | Social |
|-----------|--------|-------|---------|-------|---------|--------|
| Arjun | 101 | 80 | 72 | 90 | 85 | 75 |
| Divya | 102 | 95 | 88 | 97 | 92 | 89 |
| Manoj | 103 | 50 | 62 | 45 | 55 | 60 |
| Keerthana | 104 | 78 | 80 | 85 | 82 | 79 |
| Vishal | 105 | 65 | 70 | 60 | 68 | 72 |

You can add 20-30 more rows with random marks for practice.

Make sure to share the sheet: File → Share → Anyone with link → Viewer.

Step 1 – Connect Tableau Public Web to Google Sheets

1. Go to Tableau Public → Sign In
2. Click Create → Web Authoring
3. Left panel → Connect → Google Sheets
4. Sign in → select your sheet → click the tab (e.g., Sheet1/Accidents)

Your data is loaded in Tableau Public Web.

Step 2 – Create Total Marks Calculated Field

1. Click Data Pane → dropdown → Create Calculated Field
2. Name: Total Marks
3. Formula: `[Tamil] + [English] + [Maths] + [Science] + [Social]`
4. Click OK

Now you can use Total Marks in visualizations.

Sheet 1 – Total Marks Bar Chart

Concept: Basic visualization, aggregation, sorting

1. Open Sheet 1
2. Drag Student → Rows
3. Drag Total Marks → Columns
4. Click Sort icon → descending
5. Drag Total Marks → Color
6. Optional: Show Labels → Marks card → Label

You now have a horizontal bar chart showing all students' total marks.

Sheet 2 – Top Performers Highlight (Conditional Set Alternative)

Concept: Conditional highlighting without RANK()

1. Create Calculated Field → Top Performer:

```
IF [Total Marks] > 400 THEN "Top Performer" ELSE "Other" END
```
2. Drag Student → Rows
3. Drag Total Marks → Columns
4. Drag Top Performer → Color
5. Optional: Drag Top Performer → Filters → select "Top Performer" → OK

Students scoring >400 are highlighted.

Sheet 3 – Subject-wise Comparison

Concept: Compare multiple subjects for each student

1. Open New Sheet → Sheet 3
2. Drag Student → Rows
3. Drag all subjects → Columns (Tamil, English, Maths, Science, Social)
4. On Marks card → Show Me → Bar Chart
5. Drag Measure Names → Color → gives each subject unique color

Each student's performance in all subjects is visible side by side.

Sheet 4 – Top Threshold Chart (Dynamic Top N Alternative)

Concept: Show top students using a threshold (works in Public Web)

1. Create Calculated Field → Top Threshold:

```
IF [Total Marks] >= 400 THEN "Top" ELSE "Other" END
```

2. Drag Student → Rows

3. Drag Total Marks → Columns

4. Drag Top Threshold → Color

5. Optional: Drag Top Threshold → Filters → select Top → OK

Slider-like dynamic Top N not possible in Public Web, but adjusting threshold mimics it.

Sheet 5 – Subject Trends / Averages

Concept: Show average marks per subject

1. New Sheet → Sheet 5

2. Drag Measure Names → Columns

3. Drag Measure Values → Rows

4. Filter Measure Names → select all subjects

5. Change Marks → Bar Chart

6. Drag Measure Names → Color

7. Drag Measure Values → Label

Now you see subject-wise average performance.

Step 6 – Create Dashboard

1. Click New Dashboard (+)

2. Drag all 5 sheets into dashboard

3. Arrange the Sheets

4. Optional: Add filters (Top Performer, Subject) → Drag filter onto dashboard

5. Format titles, colors, and labels for clarity

You now have a fully interactive student performance dashboard.

Step 4 – Insights You Can Derive

| Question | Insight |
|---|--|
| Who are top performers? | Students scoring >400 highlighted in Sheet 2 |
| How does each student perform by subject? | Sheet 3 shows side-by-side marks |
| Which subjects are strong/weak overall? | Sheet 5 shows average marks per subject |
| How many students are above threshold? | Sheet 4 uses Top Threshold filter |

Key Points for Tableau Public Web

- RANK() or INDEX() functions don't work for filtering → use threshold-based Top N
- Conditional sets are simulated with calculated fields (IF Total Marks > 400 THEN ...)
- Parameters can only control simple numeric thresholds
- All interactions (filters, colors) work fully in Public Web

This workflow gives you 5 working concepts:

1. Aggregation + Bar Chart
2. Conditional Set Highlight
3. Multi-Measure Comparison
4. Top Threshold Filtering
5. Subject Trend Visualization

All 5 sheets can be combined in a dashboard, fully interactive and functional in Tableau Public Web.