# Project Documentation: Interactive Salary Dashboard in Excel

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**Project Title:**

**Data Jobs Salary Calculator Dashboard**

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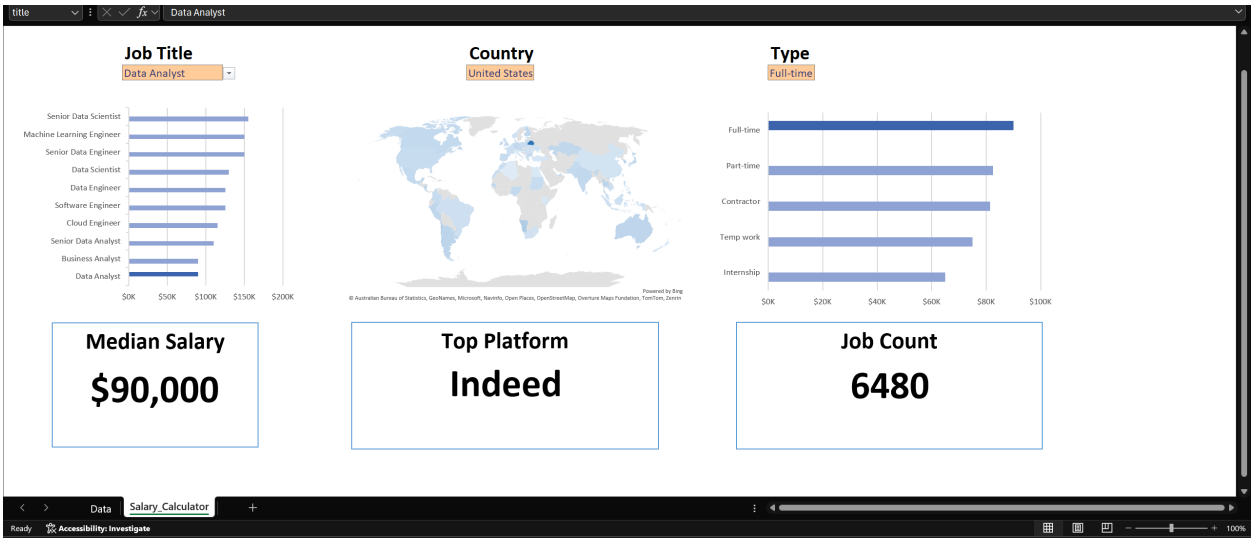
**Project Overview:**

This Excel-based project delivers an interactive, user-friendly dashboard that allows users to:

- Select a **Job Title**, **Country**, and **Job Type** from dropdowns.
- Instantly calculate the **median salary** for that combination.
- Identify the **top hiring platform** for the selected role.
- Display the **number of available jobs** that match all selected filters.
- Visualize job market trends by **job title**, **job type**, and **geography** through intuitive bar and map charts.

The dashboard is designed for recruiters, analysts, job seekers, or decision-makers looking for quick, data-driven insights into hiring trends and salaries in the tech/data sector.

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**Key Features:**

- **Dynamic Dropdown Filters**:
    - Job Title
    - Country
    - Job Type (e.g., Full-time, Contractor, Internship)
- **Auto-Calculating Metrics**:
    - Median salary based on filtered records
    - Most common hiring platform for that job
    - Total count of jobs that match the filters
- **Visual Components**:
    - **Bar Chart 1**: Median salaries by job title (for top 10 roles)
    - **Bar Chart 2**: Average salary by job type
    - **Map Chart**: Job distribution by country (interactive)
- **Clean and Modern Layout**:
    - Minimalist theme with bold headings and focused content blocks
    - Highlight boxes for salary, platform, and count

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**Data Sources & Structure:**

- **Primary Sheet: Data**
    - Contains raw job listing information including job title, country, salary, platform, and type.
- **Supporting Sheets**:
    - Data_Validation: Named lists for dropdowns (job titles, countries, types)
    - Country, Platform, Type: Separate columns used for cleaner data management and validation
    - Median_Salary: Calculated metrics and formula outputs to power visuals

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**Core Formulas & Logic:**

- **Median Salary (Dynamic with Conditions):**

```
=IFERROR(
 MEDIAN(IF(
  (jobs[job_title_short]=A2) *
  (jobs[salary_year_avg]<>0) *
  (jobs[job_country]=country) *
  ISNUMBER(SEARCH(type, jobs[job_schedule_type])),
  jobs[salary_year_avg]
 )),
 "N/A"
)
```

- Filters the main data table to only include rows matching all three filters.
- Ignores rows with 0 salary.
- Returns the median salary or "N/A" if no match is found.

**Top Platform:**

```
=XLOOKUP(title, D2:D11, E2:E11)
```

- Pulls the platform with the most postings for the selected job title.
- Based on a helper table that counts and ranks platforms by job.

**Job Count:**

```
=COUNTIFS(
 jobs[job_title_short], title,
 jobs[job_country], country,
 jobs[job_schedule_type], "*" & type & "*",
 jobs[salary_year_avg], "<>0"
)
```

- Counts how many jobs exist that match all selected filters and have a valid salary.

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**Visual Design Elements:**

- **Theme**: Professional white background with high-contrast headers
- **Dropdowns**: Highlighted with orange fill to direct attention
- **Charts**:
    - Blue-shaded horizontal bar charts for easy comparison
    - Metric cards (Median Salary, Top Platform, Job Count) in large, readable fonts
- **World Map**: Positioned centrally to give global insight (note: dependent on clean country data)

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**Known Limitations:**

- **Map Chart Warnings**:
    - Some country names are not standardized, causing map rendering issues.
- **Partial Match Risk in Job Type**:
    - SEARCH() may match unintended substrings (e.g., "Intern" in "International")
- **No Fallback Message**:
    - When no matching data is found, dashboard returns empty visuals or "N/A".

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**Summary:**

This Excel dashboard project demonstrates:

- Proficiency in advanced Excel formulas (XLOOKUP, SEARCH, MEDIAN, IF, COUNTIFS)
- Dashboard thinking: filtering, interactivity, and clean layout
- Application in real-world analytics and hiring scenarios

**Note:** Most of the data used in this project was sourced from US sources so therefore it will understandably contain more job data from the respective country.