

## Aptitude Test for BMW IT Internship Position

### Goal

Create a Generic DataGrid component using AG Grid (React) and integrate Backend Service (ExpressJS).

### Library Links

- React MUI: <https://mui.com/>
- React AG Grid: <https://www.ag-grid.com/react-data-grid/getting-started/>

Additionally, use React MUI for styling the application. Use the attached data set as a CSV file for testing the Generic DataGrid app.

### Requirements:

1. **DataGrid Component:**
  - The DataGrid component should handle any structural data with N columns and display it.
  - It should include an "Actions" column by default for custom actions like "View" and "Delete."
  - Clicking "View" should navigate to a detailed page with a back button to return to the DataGrid.
2. **Search (Use Backend API):**
  - Implement a search feature to filter and list entries matching the search.
3. **Filtering (Use Backend API):**
  - Add a filter feature for specific column criteria like "contains", "equals", "starts with", "ends with", "is empty", "greater than", "less than".
4. **Backend Service:**
  - Create an APIs in Express.js to provide data to the DataGrid component.

### Database:

- Use MySQL database for data storage.

Optionally, explore additional AG Grid features for enhanced user-friendliness.

### Results Summary:

- Prepare a presentation summarizing and showcasing your results.
- Upload the final code to a GitHub repository.
- Create a short video demo of the developed app.
- Provide all results for BMW's review to discuss further steps regarding your internship application.

Many thanks for your interest, efforts, and good luck!

**BMW IT team at Battery Cell Competence Center**

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