

# Aptitude test for BMW IT Internship position

## Goal

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

## Library Links

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

Additionally use React MUI for styling the application.

**Information:** Use the attached data set as csv file as test data for this Generic DataGrid app.

## Requirements:

### 1. DataGrid Component:

- The DataGrid component should be able to take any type of structural data having N columns and display it.
- The DataGrid component should have an "Actions" column by default, which can be used to add any number of custom actions like "View" button to view detailed information, "Delete" button to delete a row, etc.

On clicking view button user should move to a new page displaying the details and provide a back button to go back to data grid component.

### 2. Search (Use Backend API):

- Add a search feature that can be used to search data and list the entries that match the search.

### 3. Filtering (Use Backend API):

- Add a filter feature to filter the contents in a particular column based on criteria like "contains", "equals", "starts with", "ends with", and "is empty".

### 4. Backend Service:

- Create an API (Express.js) that will provide the data to the DataGrid component.

**5. Database:**

- Use MongoDB / Apache Cassandra, a NoSQL database to store the data.

Optionally try to use other features in AG Grid to make your application more user friendly.

**6. Results summary:**

- Prepare a short presentation (e.g. in Powerpoint, Keynote etc.) to summarize and to present your results.
- Upload the final code on an appropriate Github repository.
- Create a short video demo of the new developed app.
- Provide all results to BMW for further review and to discuss the next steps regarding your application and qualification for this IT internship position.

Many thanks for your interest, efforts and good luck!

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