

# NBA Data Analysis Project

## Acceptance Tests and Acceptance Criteria

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### 1. List of Contributors

- *Tunahan Oğuz*
- *Ali Eren Kurt*
- *Alkım Doryan*
- *Beyzanur Zeybek*

### 2. Task Matrix

Task	Contributor	Status
Defining Acceptance Criteria for Data Ingestion	<i>Tunahan Oğuz</i>	Completed
Defining Acceptance Criteria for Visualization Dashboard	<i>Ali Eren Kurt</i>	Completed
Defining Acceptance Criteria for Automated Reporting	<i>Alkım Doryan</i>	Completed
Defining Acceptance Criteria for Data Export	<i>Beyzanur Zeybek</i>	Completed
Writing Acceptance Test for Data Ingestion	<i>Tunahan Oğuz</i>	Completed
Writing Acceptance Test for Visualization Dashboard	<i>Alkım Doryan</i>	Completed
Writing Acceptance Test for Automated Reporting	<i>Beyzanur Zeybek</i>	Completed
Writing Acceptance Test for Data Export	<i>Ali Eren Kurt</i>	Completed
Reviewing Acceptance Tests and Criteria	<i>All team members</i>	Completed

### 3. Acceptance Criteria

The following acceptance criteria define clear and measurable conditions for validating functionalities aligned with selected use cases:

#### Use Case 1: Data Ingestion (NBA API Integration)

- System successfully fetches NBA player statistics from the nba\_api.
- Fetched data is accurately processed and stored in the database.
- Data retrieval and storage are consistent with the latest NBA statistics (approved by our unit tests).

#### Use Case 2: Visualization Dashboard

- Dashboard provides visualizations for player statistics such as 3-point percentage, points per game, and other relevant metrics.
- Charts and visualizations are responsive and accurately reflect the fetched NBA data.
- User interactions (e.g., selecting players, metrics) trigger accurate updates on the dashboard.

#### Use Case 3: Automated Reporting

- System generates detailed PDF reports when the "Export PDF" button is clicked.
- PDF reports include accurate, formatted player statistics and summaries.
- Reports are generated and downloaded promptly (within 2 seconds).

#### Use Case 4: Data Export

- Data export feature enables exporting detailed player statistics in Excel format.
- Exported Excel files include comprehensive, accurately formatted player statistics.
- Exported data precisely matches the dataset selected or displayed on-screen.

### 4. Acceptance Tests

#### Use Case 1: Data Ingestion Test (NBA API Integration)

##### Test Steps:

1. Trigger the NBA data fetching process.
2. Verify fetched data displayed correctly within the application.

##### Expected Result:

- NBA player statistics correctly fetched via nba\_api.
- Displayed data accurately matches data fetched from the nba\_api.

## **Use Case 2: Visualization Dashboard Test**

### **Test Steps:**

1. Navigate to the player comparison page.
2. Select two players and compare their metrics such as 3-point percentage or points per game.

### **Expected Result:**

- Selected metrics are plotted correctly on charts.
- Visualization accurately reflects the NBA data retrieved via nba\_api.

## **Use Case 3: Automated Reporting Test**

### **Test Steps:**

1. Navigate to the player detail page.
2. Click on the "Export PDF" button.

### **Expected Result:**

- PDF report containing detailed player statistics is promptly generated.
- The generated PDF matches the displayed statistics accurately.

## **Use Case 4: Data Export Test**

### **Test Steps:**

1. Select a specific player.
2. Click on "Export to Excel".

### **Expected Result:**

- Excel file containing comprehensive, detailed player statistics is accurately generated.
- Exported Excel data matches precisely the displayed data.