#### 1. Project Name

DasBuch

#### 2. General Description

A web platform for recording and managing book reviews. The goal is to build a professional system with a **RESTful API** to connect the PostgreSQL database with the front-end. Refined search capabilities and data manipulation via CRUD operations will be implemented.

#### 3. Key Features

1. **Full CRUD** for book reviews (Create, Read, Update, Delete).

#### 2. Search Filters:

- Search by Name.
- Search by Genre.
- Search by Author.
- o Search by **Reading Period**.
- Search by Rating (using operators: >=, <=, =).</li>
- o **Sorting Options**: Book Name, Author, Rating, and Reading Date.

### 3. Data Visualization:

- o Paginated list of reviews.
- o Detailed view of each review.

# 4. Internationalization (i18n):

 $\circ \quad \text{Multi-language support implemented from the start.}$ 

#### 5. Web Interface:

- o EJS for Node.js.
- o Razor Pages for .NET.
- o Front-end built using BootstrapStudio.

# 4. Data Structure (Review Object)

Each review will have the following attributes:

- Book Name (String)
- Author Name (String)
- Genre (String)

- Comment (String)
- Rating (Integer: 1-5)
- Reading Date (Date)

## 5. System Screens (Views)

# 1. Home Page (Reviews List)

- o Displays the complete list of reviews.
- Allows filtering by:
  - Genre
  - Author
  - Reading Period
  - Rating (>=, <=, =)
  - Sorting Options
- Actions:
  - Add Review (link to creation page).
  - View Details (link to detail page).
  - Edit and Delete directly from the list.

### 2. Review Creation Page

- o Form to add a new review:
  - Book Name.
  - Author Name.
  - Genre.
  - Comment.
  - Rating (1-5).
  - Reading Date.

# 3. Review Details Page

- o Complete display of all review information.
- o Buttons to edit or delete the review.

## 4. Review Edit Page

o Form similar to the creation page but pre-filled with current data.

## 5. Advanced Search Page

- o Dedicated page for detailed search options.
- o Results displayed as a list.

# 6. Error/404 Page

o Generic error page (e.g., "Review not found", invalid routes, etc.).

# 6. Technologies Used

## 1. Management and Organization:

o Trello

## 2. Back-end:

- NodeJS/Express
- o .NET (C#)
- o PostgreSQL Database

#### 3. Front-end:

- o EJS for NodeJS
- o Razor Pages for .NET
- o BootstrapStudio

#### 4. Internationalization:

o i18n standard for multi-language support.

# 5. **Version Control**:

o Git/GitHub

# 6. Agile Methodology:

 $\circ \quad \text{Sprint planning with iterative deliveries.} \\$