TARGET READY - GRP 1 - API DOCUMENTATION

Given that the users of the application act as vendors entering product details, there is a need to create a set of APIs to handle various functionalities such as user authentication, product data entry, planogram management, and conflict resolution. Below is an explanation of the necessary APIs along with example documentation for each.

Required APIs

1. **User Authentication and Authorization**
   - **POST /api/auth/register:** Register a new vendor.
   - **POST /api/auth/login:** Authenticate a vendor and issue a token.
   - **POST /api/auth/logout:** Logout the vendor and invalidate the token.

2. **Product Management**
   - **POST /api/products:** Add a new product.
   - **GET /api/products:** Retrieve a list of products for the authenticated vendor.
   - **GET /api/products/:id:** Retrieve details of a specific product.
   - **PUT /api/products/:id:** Update details of a specific product.
   - **DELETE /api/products/:id:** Delete a specific product.

3. **Planogram Management**
   - **POST /api/planograms:** Add a new product placement in the planogram.
   - **GET /api/planograms:** Retrieve the current planogram.
   - **PUT /api/planograms/:id:** Update a product placement in the planogram.
   - **DELETE /api/planograms/:id:** Remove a product from the planogram.

4. **Location and Conflict Resolution**
   - **GET /api/locations/availability:** Check the availability of a location.
   - **POST /api/locations/resolve:** Resolve conflicts and assign locations.

This API documentation provides a comprehensive guide for implementing the backend of your planogram application, ensuring that vendors can manage their product placements effectively. Each API endpoint includes the necessary HTTP methods, request bodies, headers, and expected responses to facilitate smooth integration and functionality.