# Odoo Development Assignment

*Overview*

You have been tasked with creating a custom Odoo module for a fictional company, "Tech Gear Inc." This company sells a variety of electronic devices and accessories. The module should streamline their inventory management by integrating existing Odoo modules and incorporating functionality to parse product data from an Excel file.

*Requirements:*

1. **Module Creation:**
   - Create an Odoo module named `tech_gear_inventory`.
   - Structure the module following Odoo's standard conventions.
2. **Excel File Parsing:**
   - Implement functionality to parse an Excel file containing product data and update the Odoo database accordingly.
   - Ensure the module can handle a standard Excel file with the following columns:
     - `Product Name`
     - `Category`
     - `Price`
     - `Quantity`
   - Map these columns to existing fields in the `product.template` model.
3. **Inventory Module Extension:**
   - **Product Model:**
     - Extend the existing `product.template` model to include:
       - `category` (Many2one): A relation to a `product_category` model.
     - Implement a mechanism to synchronize data from the parsed Excel file to the Odoo database.
   - **Product Category:**
     - Create a new `product_category` model with the following fields:
       - `name` (Char): The name of the category.
       - `description` (Text): A brief description of the category.
4. **Views:**
   - Extend or create views to manage the models:
     - **Product Category Views:**
       - Create form, tree, and search views for managing the `product_category` model.
5. **Menus:**
   - Ensure the existing menus are extended or updated to navigate to each model's views appropriately, and run the importer.

6. **Functional Requirements**
   - **Excel File Parsing:** Ensure that the module correctly parses an Excel file and updates the database accordingly.
7. **Testing:**
   - Write a test to verify the functionality of the module:
     - **Excel Parsing:** Ensure data from a sample Excel file is parsed correctly and populates the database.

Submission:
1. Package the module into a zip file named `tech_gear_inventory.zip`.
2. Include a README file detailing the module's functionality, installation steps, and how to use it.
3. Provide a sample Excel file named `products_data.xlsx` to demonstrate the parsing functionality

## Evaluation Criteria:

- **Functionality:** The module meets all the specified functional requirements.
- **Code Quality:** The code is clean, follows best practices, and is well-documented.
- **UI/UX:** The views are user-friendly and intuitive.
- **Testing:** Tests cover the primary functionalities and pass successfully.