Here's a structured task assignment for the product development, with deadlines and sub-tasks to be completed by **within 2 days from receipt of this email** . This is meant for an Androidapp using **Android Studio** and **Core Java**:

Task Assignment

Landing Page

1. Fetch Product Categories via HTTP Request:

- **Task**: Implement an HTTP request to fetch product categories from `https://dummyjson.com/products/categories`.
- **Sub-task**:
  - Set up networking with an HTTP library (e.g., OkHttp, Retrofit).
  - Parse the response and handle data errors.

2. Create Horizontally Scrollable Categories Section:

- **Task**: Design and display a horizontally scrollable section for listing categories.
- **Sub-task**:
  - Use `RecyclerView` with horizontal scrolling.
  - Populate it with data received from the HTTP request.

3. Display Product Cards Below the Category Section:

- **Task**: Show cards for 20 products (image, name, rating, discount, price) in 2 cards per row.
- **Sub-task**:
  - Make another HTTP request to `https://dummyjson.com/products?limit=20`.
  - Design the layout using a `RecyclerView` with GridLayoutManager (2 items per row).
  - Ensure proper spacing between cards.

Search Functionality

4. Implement Search Box in Navigation Bar:

- **Task**: Add a search box on the navigation bar for searching products by name.
- **Sub-task**:
  - Set up an `EditText` for user input.
  - Implement the `TextWatcher` to detect user input.

5. Filter Products Based on Search Term:

- **Task**: Filter relevant products when the search term is 3 or more characters long.
- **Sub-task**:
  - Make an HTTP request to `https://dummyjson.com/products?limit=200` for fetching all product data.
  - Implement a filtering mechanism based on product name using the entered search term.
  - Display relevant results in a `RecyclerView` and ensure UI updates dynamically.

Navigation and Detail Handling

6. Navigate to Product Description Screen:

- **Task**: On product click (from landing screen), navigate to the description screen.
- **Sub-task**:
  - Pass product details to the product description screen using `Intent`.
  - Design a product detail screen with the relevant information.

7. Filter Products Based on Category:

- **Task**: If the user clicks a category, navigate to a search result screen showing products in that category.
- **Sub-task**:
  - Implement filtering based on category.
  - Display the filtered products (name, price, discount, image) in a `RecyclerView`.

Product Description Screen

8. Fetch Product Description by Product ID:

- **Task**: Fetch product description via `https://dummyjson.com/products/{product_id}`.
- **Sub-task**:
  - Use dynamic endpoints by replacing `{product_id}` with the actual product's ID.
  - Parse and display the fetched product details.

9. Display Product Details on Description Screen:

- **Task**: Show product image, name, description, price, rating, brand, shipping info, warranty, and stock availability.
- **Sub-task**:
    - Design a proper layout with all required fields.
    - Use `TextView`, `ImageView`, and other views to render content attractively.

10. Display Customer Reviews:

- **Task**: Show a section on the description screen for customer reviews.
- **Sub-task**:
    - Fetch and display reviews from the product API.
    - Implement this section under the product details.

Simmers for Fallback Content

11. Implement Simmers for Fallback Content:

- **Task**: Display shimmer animations while data is being fetched.
- **Sub-task**:
    - Implement a loading state using a placeholder animation until the data is available.

Note:

- **UI Design**: Ensure all screens are designed to keep the overall app visually appealing.
- **Tech Stack**: Complete all tasks using **Android Studio** and **Core Java**. No additional frameworks or libraries should be used outside of Android's default ecosystem.

This detailed task breakdown ensures that all requirements are covered for a well-structured Android application. Let me know if you'd like more assistance in managing this project!

For any query please contact at 8527366173 (Mr. Ved Prakash)