**LOW-LEVEL DESIGN FOR FLIPKART APPLICATION**

1. **User Management:**

**Trivial:**

User management might be considered as trivial, and it is under small scale systems because there is no complexity in login, registration and profile management functionality.

**Novel:**

User management might be considered as novel under large scale systems because some systems or services that require multi-factor authentication and integration with third-party identity providers. So, it is very complex to implement security functionality.

1. **Shopping cart and Checkout:**

**Trivial:**

Shopping cart and checkout might be considered as trivial, and it comes under large scale, mature platforms with low uncertainty because the user can add, remove the items in shopping cart as well as in checkout the payment methods and saved address functionality has low risk.

**Novel:**

Shopping cart and checkout might be considered as novel, in more complex or customized e-commerce systems, designing and implementing a shopping cart and checkout process can be quite challenging for providing the support for various payment methods (e.g., credit cards, digital wallets, cryptocurrencies) functionalities.

1. **Search and Navigation:**

**Trivial:**

Search and Navigation **might be trivial, especially in large systems or projects. If the**

**search feature is relatively simple and only involves searching through a small**

**dataset with basic keyword matching, the design might be considered as trivial. If the**

**system has a straightforward navigation structure with a small number of pages or**

**screens and minimal hierarchy, the design might be considered as trivial.**

**Novel:**

**Search and Navigation might be novel, especially in large systems because when**

**handling scalability issues, integrating with external services is quite complex to**

**implement those functionalities.**

1. **Order and Delivery:**

**Trivial:**

**In standard e-commerce applications the design of order and delivery system can be straight-forward. It** includes basic functionalities such as adding items to a shopping cart, placing an order, entering shipping information, and selecting delivery options. It operates on a small scale with a manageable number of orders and delivery logistics, the design of order and delivery systems may not require extensive complexity. So, it considered as trivial.

**Novel:**

If the business has complex requirements related to order and delivery management, and the functionalities such as custom pricing structures, subscription-based services, or intricate delivery scheduling. If the system needs to integrate with third party services for order fulfillment, inventory management, or shipping logistics, the design becomes more complex. So, it might be considered as Novel**.**

1. **Reviews and Ratings:**

**Trivial:**

If the reviews and ratings system is straightforward, with simple features such as allowing users to submit text-based reviews and rate items on a numerical scale and for small-scale applications with a limited users and a small number of products or items to review, the design of the reviews and ratings system may not require extensive complexity. So, the design might be considered as trivial.

**Novel:**

If the reviews and ratings services need to support advanced features such as rich media (e.g., photos or videos), tagging and categorization of reviews or personalized recommendations based on user preferences must be complex and detecting and preventing fake reviews or rating manipulation, and managing user permissions and roles within the reviews and ratings system can present additional challenges. For these features we often require to implement the security, privacy and compliance requirements. So, the design must be considered as novel.