

NEK Mart Software Requirements Specification (SRS)

User Types:

- **Customers:** will mainly use the frontend site for buying products
 - Guest
 - Registered
 - Subscribed

- **Traders:** will use the portal for selling product
 - Standard
 - VIP

- **Service Provider:** will use the portal for selling services
- **Admins:** will use the portal for all kinds of management, monitoring and authorization tasks
- **Super Admins:** will be responsible for maintenance works

Functionalities:

- Traders will be able to register themselves through the portal with required basic details, admins will also be able to register traders
- Traders will have below attributes:
 - Name
 - Trading Name
 - Registered Name
 - Store Name (unique)
 - Contact Person
 - Contact Person Title
 - Contact Person First Name
 - Contact Person Last Name
 - Contact Person Address Line 1
 - Contact Person Address Line 2
 - Contact Person Postcode
 - Contact Person City
 - Contact Person County
 - Contact Person Country

- Slug
 - Trading Address
 - Trading Address Line 1
 - Trading Address Line 2
 - Trading Postcode
 - Trading City
 - Trading County
 - Trading Country
 - Registered Address
 - Registered Address Line 1
 - Registered Address Line 2
 - Registered Postcode
 - Registered City
 - Registered County
 - Registered Country
 - NI/UTR number
 - Copy of ID
 - Proof of address
 - Multiple Bank Accounts
 - Account Name
 - Account Number
 - Bank Name
 - Branch Name
 - Routing Number
 - Bank Sort Code
 - Swift Code
 - Is Primary
 - Paid Registration Fee
 - Is VIP
 - Subscription Start Date
 - Subscription End Date
 - Is Verified
-
- Once registered, system will prompt to verify email
 - Once email verification is successful, system will prompt to upload documents and other details necessary for account approval
 - Then Admins will check and verify new Trader account
 - Once approved, Trader will have to pay a Registration Fee but Admins can omit the Subscription fee for any Trader, the fee will be defined in system parameters & can be changed dynamically by the admins
 - Stripe and Paypal will be integrated into the system to receive any kind of payments

- Once approved and payment is completed, Traders can add Products with below attribute:
 - Title
 - Slug
 - Brand Id
 - Categories
 - Model
 - SKU
 - Dimensions
 - Length
 - Width
 - Height
 - Weight
 - Material
 - Unit of Measurement
 - Unit Base Price
 - Multiple Specifications
 - Product Id
 - Key
 - Value
 - Description(HTML Editor)
 - Multiple Images
 - Product Id
 - Alt
 - Name
 - Path
 - Cover Image
 - Multiple Variants
 - Attributes
 - Product Id
 - Attribute Values
 - Attribute Id
 - Partial SKU
 - Multiple Variants
 - Full SKU
 - UPC/EAN Number
 - Image
 - Price Difference
 - Available Quantity
 - Variant Values
 - Variant Id
 - Attribute Id

➤ Attribute Value Id

- Multiple Product Listings
 - Product Id
 - Variant Id
 - Quantity
 - Cost Price
 - Selling Price
 - Discount Type
 - Discount Value

- Traders will need a unique UPC(Universal Product Number) or EAN(European Article Number) number for each Product Variant which they can avail by themselves or can buy from NEK. However, if a Product Variant already exists in the system, Trader can not entry it again, rather will have to select it from the dropdown list.
- Traders will be able to select product(s) for listing/showcasing, give quantities for the products to list
- System will charge traders a fixed recurring Subscription Fee for product listing every month regardless of quantity, number or category of the product(s) listed
- After selecting products product(s) for listing, the system will prompt for below packaging and shipping information:
 - Package Length
 - Package Width
 - Package Height
 - Package Weight
 - Shipping Method(If Any)
 - Shipping Charge(If Any)

- System will calculate warehousing charge based on dimensions and weight of the package(s) defined which will vary by Product Categories and unit cost for dimensions and weight will be defined the Admin while creating Product Categories
- After paying the warehousing fee for one month, the system will give a packaging label as QR Code or Bar Code or both which the Trader must print and stick to package(s) before shipping them to NEK Warehouse. The system and NEK Admins will track the package(s) by this label.
- After receiving the package(s) in the Warehouse, Admin will check the given dimensions, weight and other details of the package(s) and product(s). If the details given by the Trader mismatch with the actual package(s) or product(s), Admin can request for amending the amount payment done by the Trader
- If the details match or after amended amount is paid by the Trader, Admin will entry products in system after sticking item labels in forms of QR Code or Bar Code or both for each products generated by the system and system will generate receipt and notify Trader

- Product Entries will have below attributes:
 - Product Listing Id
 - Product Id
 - Variant Id
 - Warehouse Id
 - Rack Id
 - Bin Id
 - Quantity
 - Cost Price
 - Selling Price

- Once Product entries in the system, it will be available for purchase for customers
- Customers can register themselves to access all the functionalities
- Customers:
 - Name
 - Title
 - First Name
 - Last Name
 - Email
 - Password (encrypted)
 - Phone Number
 - Month of the Birth
 - Gender
 - Home Address
 - Address Line 1
 - Address Line 2
 - Postcode
 - City
 - County
 - Country
 - Is Subscribed
 - Subscription Start Date
 - Subscription Expiry Date
 - Loyalty Card Number
 - Profile Image

- Customers can subscribe themselves by paying a subscription fee defined by NEK
- Once subscribed, system will generate Loyalty Card for the Customer and they can enjoy below benefits:
 - Free Delivery
 - Discount Voucher
 - Discount From Service Provider

- Non-subscribed user will get the free delivery after purchasing of a certain amount
- Customers can browse, search, filter and view Products from the Frontend Site
- Elastic search will be used to offer best search experience for Customers
- Products can be filtered by below options:
 - Categories
 - Brands
 - Price Range
 - Rating

- Products can be sorted by below options:
 - Price(Low to High)
 - Price(High to Low)
 - Popularity
 - Rating

- Products also will be displayed categorized by
 - Featured Products: VIP Traders' latest or top rated 15 Products
 - Popular Products: Most sold products in 30 days

- Customers will have to browse to Product details page to select Variant and add the Product to Cart
- Customers can compare prices of the selected Product Variant from different Traders selling the same Product Variant in NEK
- Registered Customers can also Wishlist Products for finding quickly later. Wishlisted Products can be found in Customer dashboard
- Wishlists will have below attributes:
 - Product Id
 - Customer Id

- Customers can see the view counts of Products. View counts will be counted as current view counts and total view counts
- Product Reviews will be displayed in the Product details page
- Related Products will be displayed in the Product details page
- Product View Counts:
 - Product Id
 - Customer IP/Mac

- Customers can update Product quantities or remove Product from Cart
- Product will not be deleted from the guest users basket if they will not place the order
- Customers can order Products already in the cart
- Customers can purchase products as a guest or registered user

- During checkout Customers will have to give below details to confirm Order:

- Name
 - Title
 - First Name
 - Last Name
- Email
- Phone Number
- Shipping Address
 - Address Line 1
 - Address Line 2
 - Postcode
 - City
 - County
 - Country
 - Contact Number
 - Contact Name
- Note
- Is Gift
- Gift Message
- Payment Details
 - Card Details/Paypal ID
 - Billing Address
 - Address Line 1
 - Address Line 2
 - Postcode
 - City
 - County
 - Country

- Orders will have below Attributes:

- Unique System Generated Order ID
- Customer IP/MAC
- Multiple Order Items
 - Variant Id
 - Quantity
 - Price
- Total Price
- VAT
- Shipping Charge
- Sub Total
- Voucher Id
- Discount

- Grand Total
- Shipping charge will be calculated automatically by the system using a predefined algorithm. Royal Mail API will be used to define charges
- Customers can't cancel the order after it is placed
- Customers can return or exchange products
- Admins will initiate refund once the returned product is received in the warehouse
- Registered Customers can review products, Traders can reply the review
- Product Reviews:
 - Product Id
 - Customer Id
 - Rating
 - Review
 - Reply
- Admins can delete Customer Reviews
- Admins can block Registered Customer accounts
- Registered Customers can update profile, profile image, change password from their dashboard
- Registered Customers can view their order history from dashboard
- Registered Customers can track an order from dashboard
- Registered Customers can deactivate their account
- Registered Customers can report Trader account, after getting too many reports Admins can disable Trader Account
- Customer Complains:
 - Trader Id
 - Customer Id
 - Variant Id
 - Complain Details
- NEK Mart will get commission from Product sales
- Once a Product is sold, revenue from selling Products will be added to Traders Balance after deducting the commission and VAT on commission for NEK
- Revenue records will be stored in Transactions
- Transaction will have below attributes:
 - Transaction Purpose:
 - Type
 - Purpose
 - Trader Id
 - Variant Id
 - Order Id
 - Amount

- Traders will be able to transfer any amount from their balance to their bank accounts given while registration after 30 days of the amount added to Traders balance .
- Traders will be able to see their product details in their portal. Ex. quantity, damaged, sold, expired etc).
- Traders can get a VIP status by paying certain amount defined by NEK, VIP Trader's products will be listed on top in every instances
- Admins can add Services with below attributes:
 - Title
 - Image
 - Link
 - Price
 - Details

- Service Conversion counts will be stored as below:
 - Service ID
 - Customer IP

- Admins will be responsible for adding Product Categories and Subcategories
- Categories will have below attributes:
 - Title
 - Parent Id
 - Slug
 - Minimum Quantity of Products
 - Image
 - Warehousing Fee Per Unit Volume
 - Warehousing Fee Per Unit Weight
 - Is Flammable
 - VAT

- Each category will have sub-categories. Each subcategory will have sub-categories as well.
- Admins can add Brands with below attributes:
 - Title
 - Slug
 - Logo

- Admins will manage Refunds upon product returns or damages
- Admins will add Warehouses, Racks and Bins with below attributes:
 - Name
 - Address
 - Address Line 1

- Address Line 2
 - Postcode
 - City
 - County
 - Country
 - Phone
 - Mobile
 - Multiple Racks
 - Warehouse Id
 - Rack Number
 - Multiple Bins
 - Rack Id
 - Bin Number
- Admins will manage Sales & Offers banners with below attributes:
 - Title
 - Slug
 - Link
 - Image
 - Start Date
 - End Date
- Admins will create Discount Vouchers with below attributes:
 - VoucherCode
 - Expiry Date
 - Start Date
 - Discount Value
 - Type(Percentage/Amount)
- Admins will be responsible for Content Managements
- Admins will be responsible for all kinds of Access Controls of the system
- Admins will manage all the System Parameters:
 - Customer Subscription Fee
 - Trader Registration Fee
 - Trader Monthly Subscription Fee
 - VIP Trader Subscription Fee
 - Delivery Deduction Percentage of Customers
 - Minimum Purchase Amount for Free Delivery
 - Minimum Overseas Shipping Charge
 - Product Commission Percentage
 - Stripe Publishable Key
 - Stripe Secret Key(encrypted)

- Paypal Client ID
- Paypal Client Secret(encrypted)
- Royal Mail Client ID
- Royal Mail Client Secret(encrypted)
- Google API Key for Currency Conversion (encrypted)
- Algolia API Key (encrypted)
- Get Address API Key (encrypted)
- Season and Related Parameters

Additional Requirements:

- Blog & Events managed by Admins
- Vlog managed by Admins
- Region based Currency conversion(base GBP, Euro, Dollar, BDT)
- Social Media Trending Products
 - Displaying Same Product from Different Traders
- Season based website color theme change
- Warehouse space allocation to traders
- Abuse word filtration
- Service Categories
- Share Products on different social media platforms

Technology Stack:

- E-Commerce Consumer Site: Next.js(v13.0+), React.js(v18.0+), Tailwind CSS(3.0+)
- Management Portal: PHP Laravel(v8.0+ => v10.0+), Vue.js(v2.0+), Inertia.js(v1.0), Vuetify(2.0+)
- Database: MySQL Server v5.7
- Android/iOS App: React Native
- Cloud Server: AWS EC2 Instance
- Cloud File Storage: AWS S3 Bucket