

# Šnjofkalo Mobile App - Navigation Flow Document

## Introduction

This document outlines the navigation structure and user flows for the Šnjofkalo mobile application. It serves as a guide for understanding how users will move between screens and how the information architecture is organized. The navigation structure is designed to be intuitive, minimizing the number of steps required to complete key tasks while maintaining a clean and consistent interface.

## Navigation Structure

The Šnjofkalo mobile app uses a combination of tabbed navigation, hierarchical navigation, and modal screens to create an intuitive user experience.

### Primary Navigation Elements

#### 1. Bottom Navigation Bar

The main navigation method is a persistent bottom navigation bar present on most screens with three primary tabs:

- **Home:** The app's main landing page with featured products
- **Categories:** Browse all product categories
- **Cart:** View and manage items in the shopping cart

#### 2. Back Navigation

- Present on all screens except the main tab screens
- Allows users to return to the previous screen in the hierarchy
- Implemented as a back arrow in the top-left corner of the screen

#### 3. Hierarchical Navigation

- Users navigate deeper into content by selecting items (e.g., from categories to products)
- Each level maintains consistent navigation patterns

## Core User Flows

### 1. Authentication Flow

App Launch → Login Screen → [Optional: Registration Screen] → Home Screen

#### Details:

- New users can navigate from Login to Registration

- After successful registration, users are automatically logged in
- Authenticated users bypass the login screen on subsequent app launches

## 2. Product Discovery Flow

Home Screen → [Multiple paths] → Product Detail Screen

### Paths include:

1. **Featured Products path:** Home Screen → Select Featured Product → Product Detail Screen
2. **Search path:** Home Screen → Search → Search Results → Select Product → Product Detail Screen
3. **Category path:** Home Screen → Categories Tab → Select Category → Category Products → Select Product → Product Detail Screen

## 3. Shopping Cart Flow

Any Screen → Cart Tab → Shopping Cart Screen → [Login if needed] → Checkout Flow

### Details:

- The Cart icon in the bottom navigation is accessible from almost any screen
- Items can be added to the cart from Product Detail screens
- Quantity adjustments and item removal are handled within the Cart screen

## 4. Checkout Flow

Shopping Cart → Checkout: Shipping Address → Checkout: Payment Method → Order Review → Order Confirmation

### Details:

- Linear progression through checkout stages
- Each stage has back navigation to modify previous selections
- Order confirmation screen provides order details and options for continued shopping

## 5. Order Management Flow

Profile Screen → Order History → Order Details → [Optional: Order Tracking]

### Details:

- Users access their order history through the Profile screen

- Order details provide comprehensive information about past purchases
- Tracking is available for orders in transit

## Cross-Screen Navigation

### Common Navigation Actions

#### Profile Access

- Available from the Home screen via profile icon in the header
- Provides access to account settings, order history, saved addresses, and payment methods

#### Search Functionality

- Available from the Home screen and Category screens
- Allows for direct navigation to products by name, description, or keywords

#### Cart Access

- Persistent bottom tab navigation makes the cart accessible from most screens
- Visual indicator shows the number of items in cart

### Modal Screens

Some functions appear as modal overlays rather than full-screen navigations:

- Filter/sort options on product list screens
- Add to cart confirmations
- Error messages and confirmations

## Navigation Rules

1. **Depth Limitation:** Navigation depth is limited to 5 levels from the main tabs to minimize user disorientation
2. **Consistent Back Behavior:** Back buttons always return to the previous screen
3. **Escape Routes:** Critical flows (like checkout) always provide a way to cancel and return to main navigation
4. **Tab Persistence:** Tab selection is maintained when navigating within a tab's hierarchy
5. **Login Interception:** Secure actions automatically redirect to login if the user is not authenticated

## Navigation State Management

The app maintains navigation state to provide a consistent experience:

- Remembers the last tab visited when returning to the app

- Preserves scroll position when navigating back to list screens
- Maintains cart contents between sessions (until checkout or explicit removal)
- Retains form data during checkout if the user navigates away temporarily

## Edge Cases and Error States

### Connectivity Issues

- Offline mode shows cached content where possible
- Clear error messaging when connectivity is required
- Automatic retry of critical operations when connection is restored

### Session Timeout

- Authentication expiration redirects to login screen
- Form data is preserved where possible
- Clear explanation of timeout reason

### Deep Linking

- The app supports deep linking to specific products and categories
- Links from notifications properly navigate to the appropriate screen
- External links (from emails, etc.) correctly open the relevant content

## Navigation Testing Scenarios

Key paths to verify during testing:

1. Complete purchase flow from product discovery to order confirmation
2. Category browsing to product selection
3. Search functionality to product detail
4. Account creation and profile management
5. Order history and tracking access
6. Cart management across multiple sessions
7. Back navigation at all levels
8. Tab navigation persistence

## Conclusion

This navigation framework provides a complete map of how users will move through the Šnjofkalo mobile application. The structure prioritizes ease of use, consistency, and efficient completion of key tasks while maintaining flexibility for future feature additions.

