# Phone Verification Authentication -**Implementation Summary**

# Implementation Complete

This document summarizes the phone verification authentication system implemented for the Yardım Yolda Flutter app.

### Files Created

### **Domain Layer (Models)**

- 1. lib/features/auth/domain/models/user\_profile.dart
  - UserProfile model matching the database schema
  - JSON serialization/deserialization
  - copyWith method for immutability

#### 2. lib/features/auth/domain/models/auth state.dart

- AuthState model for managing authentication status
- Helper methods: isAuthenticated, isNewUser
- Factory constructors for different states

### Data Layer (Repository)

- 1. lib/features/auth/data/repositories/auth repository.dart
  - sendOTP() Send verification code via SMS
  - verifyOTP() Verify the OTP code
  - getUserProfile() Fetch user profile from database
  - createUserProfile() Create new user profile
  - updateUserProfile() Update existing profile
  - signOut() Sign out user
  - Turkish error messages

### **State Management (Riverpod)**

- 1. lib/features/auth/providers/auth state provider.dart
  - AuthStateNotifier for managing auth state
  - Listens to Supabase auth changes
  - Providers:
    - o authStateProvider Main auth state
    - currentUserProvider Current user
    - o currentUserProfileProvider User profile
    - o isAuthenticatedProvider Auth status check

# **Presentation Layer (Screens)**

- 1. lib/features/auth/presentation/screens/auth phone screen.dart
  - Phone number entry with Turkish formatting
  - Real-time validation
  - Auto-formatting (5XX XXX XX XX)

- Converts to international format (+90...)
- Loading states and error handling

#### 2. lib/features/auth/presentation/screens/otp\_verify\_screen.dart

- 6-digit OTP input with auto-focus
- 60-second resend timer
- Auto-verify when complete
- Error handling with retry
- Masked phone number display

#### 3. lib/features/auth/presentation/screens/onboarding\_screen.dart

- 3-page onboarding flow
- Welcome page
- Features showcase
- Name entry and profile creation
- Skip functionality

### **Configuration & Routing**

#### 1. lib/routes/app\_router.dart (Updated)

- New routes: /auth/phone, /auth/verify, /onboarding
- Auth-aware navigation
- Automatic redirects based on auth state
- Protection for authenticated routes

#### 2. lib/features/auth/presentation/pages/splash\_page.dart (Updated)

- Integrated with auth state provider
- Smart navigation based on user status

#### 3. lib/features/dashboard/presentation/pages/dashboard\_page.dart (Updated)

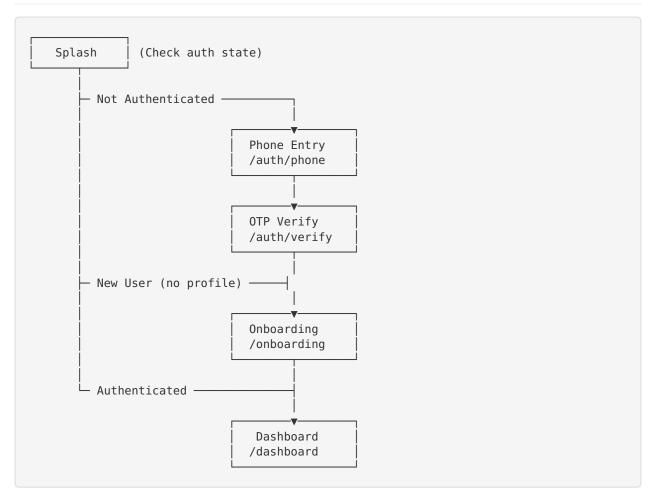
- Display user profile information
- Sign out functionality using auth provider

#### **Documentation**

#### 1. lib/features/auth/README.md

- $\,{}^{\circ}$  Comprehensive authentication flow documentation
- Architecture overview
- Usage examples
- Database schema

# 🔄 Authentication Flow



# Ul Features

### **Phone Entry Screen**

- V Turkish phone number formatting
- **K** Real-time validation
- Auto-formatting as user types
- Clear instructions in Turkish
- V Loading indicator during API call
- V Error messages via SnackBar

#### **OTP Verification Screen**

- **V** 6 separate input boxes
- V Auto-focus on next field
- <a> Auto-verify when complete</a>
- 60-second resend countdown
- Masked phone number display
- V Loading state with Turkish text

## **Onboarding Screen**

- **3**-page introduction
- V Feature highlights

- Name collection
- Skip button
- Page indicators
- V Profile creation

# **@** Security & Error Handling

### **Security Features**

- Supabase Auth with PKCE flow
- V Secure OTP verification
- Session management
- Protected routes

### **Error Handling**

- Network errors
- V Invalid OTP codes
- Expired codes
- **V** Rate limiting
- V Profile creation failures
- <a> All errors in Turkish</a>

# 💾 Database Integration

#### **User Profile Creation**

When a user verifies their phone number:

- 1. System checks if profile exists in user\_profiles table
- 2. If not exists, creates new record with:
- id: auth.user().id
- phone: verified phone number
- role: 'customer' (default)
- created\_at, updated\_at: timestamps
- 3. If exists, just redirects to dashboard

### **Profile Updates**

After onboarding, the profile is updated with:

- full name: from user input
- Other fields can be added later

# Localization

All text is in Turkish:

- Screen titles and labels
- Button text
- Error messages
- Validation messages
- Success notifications
- Loading indicators



- flutter\_riverpod: State management
- supabase flutter: Authentication and database
- go router: Navigation and routing
- flutter (built-in): UI components and formatters



# Testing Checklist

Before deploying, test:

- -[] Phone number formatting
- -[] OTP sending
- [ ] OTP verification
- [ ] Profile creation for new users
- [ ] Profile retrieval for existing users
- [ ] Onboarding flow
- -[] Navigation between screens
- [ ] Sign out functionality
- [ ] Error scenarios (invalid OTP, expired code, etc.)
- -[] Resend OTP functionality



## Next Steps

To use this implementation:

#### 1. Setup Supabase

- Enable Phone Auth in Supabase Dashboard
- Configure phone provider (Twilio, MessageBird, etc.)
- Set up rate limiting

#### 2. Create Database Table

```
sql
CREATE TABLE user profiles (
id UUID PRIMARY KEY REFERENCES auth.users(id),
phone TEXT NOT NULL,
full_name TEXT,
role TEXT NOT NULL DEFAULT 'customer',
avatar_url TEXT,
created at TIMESTAMPTZ NOT NULL DEFAULT NOW(),
updated_at TIMESTAMPTZ NOT NULL DEFAULT NOW()
);
```

#### 3. Configure Environment

- Add SUPABASE\_URL to .env
- Add SUPABASE ANON KEY to .env

### 4. Run the App

```
bash
flutter pub get
flutter run
```

# Code Quality

- Clean architecture (domain/data/presentation)
- Separation of concerns
- V Proper error handling
- V Loading states
- Type safety
- Code comments
- V Null safety
- V Immutable state
- <a> Reactive programming</a>

# **®** Key Achievements

- 1. Complete Phone OTP Flow: From phone entry to dashboard
- 2. Automatic Profile Management: Creates profiles for new users
- 3. Turkish Language Support: All UI in Turkish
- 4. Smart Navigation: Auth-aware routing with automatic redirects
- 5. User Experience: Loading states, error handling, validation
- 6. State Management: Clean Riverpod implementation
- 7. **Security**: Supabase Auth with proper session management
- 8. Documentation: Comprehensive README and comments

# **Support**

For issues or questions about this implementation:

- 1. Check the README in lib/features/auth/
- 2. Review Supabase documentation
- 3. Check Riverpod documentation for state management

**Implementation Date**: October 22, 2025 **Status**: ✓ Complete and Ready for Testing