

# Flutter Project Documentation

This document contains in-code documentation extracted and annotated from the Dart source files of your Flutter project.

## main.dart

```
import 'package:flutter/material.dart';
import 'dart:math';

// Entry point of the Flutter app
void main() {
  // Launches the main widget of the app
  runApp(MyApp());
}

// A widget that doesn't hold mutable state
class MyApp extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      title: 'Stitch Design',
      theme: ThemeData(
        primarySwatch: Colors.blue,
        scaffoldBackgroundColor: Colors.black,
      ),
      home: TradingLoginScreen(),
      debugShowCheckedModeBanner: false,
    );
  }
}

// A widget that holds mutable state
class TradingLoginScreen extends StatefulWidget {
  @override
  _TradingLoginScreenState createState() => _TradingLoginScreenState();
}

class _TradingLoginScreenState extends State<TradingLoginScreen> {
  // Controller to handle text input
  final TextEditingController _emailController = TextEditingController();
  // Controller to handle text input
  final TextEditingController _passwordController = TextEditingController();
  bool _rememberMe = false;
  bool _isPasswordVisible = false;

  @override
  void initState() {
    super.initState();
  }
}
```

```

    _emailController.text = 'xyz@gmail.com';
    _passwordController.text = 'xyz';
  }

  @override
  void dispose() {
    _emailController.dispose();
    _passwordController.dispose();
    super.dispose();
  }

  void _handleSignIn() {
    showDialog(
      context: context,
      builder: (BuildContext context) {
        return AlertDialog(
          backgroundColor: Color(0xFFf1E1E1E),
          title: Text(
            'Sign In',
            style: TextStyle(color: Colors.white),
          ),
          content: Text(
            'Email:    ${_emailController.text}\nPassword: '
            '${_passwordController.text.replaceAll(RegExp(r'.'), '*')}\nRemember me: $_rememberMe',
            style: TextStyle(color: Colors.white70),
          ),
          actions: [
            TextButton(
              onPressed: () => Navigator.of(context).pop(),
              child: Text(
                'OK',
                style: TextStyle(color: Color(0xFF007AFF)),
              ),
            ),
          ],
        );
      },
    );
  }

  void _handleForgotPassword() {
    showDialog(
      context: context,
      builder: (BuildContext context) {
        return AlertDialog(
          backgroundColor: Color(0xFFf1E1E1E),
          title: Text(
            'Password Reset',
            style: TextStyle(color: Colors.white),
          ),
          content: Text(
            'Your password has been reset to: 123\n\nPlease use this temporary password '
            'to sign in.',
            style: TextStyle(color: Colors.white70),
          ),
        );
      },
    );
  }

```

```

    ),
    actions: [
      TextButton(
        onPressed: () {
          Navigator.of(context).pop();
// Notify Flutter that the internal state has changed
          setState(() {
            _passwordController.text = '123';
          });
        },
        child: Text(
          'OK',
          style: TextStyle(color: Color(0xFF007AFF)),
        ),
      ),
    ],
  );
},
);
}

void _handleSignUp() {
  showDialog(
    context: context,
    builder: (BuildContext context) {
      return SignUpDialog();
    },
  );
}

@override
Widget build(BuildContext context) {
// Provides the basic material design visual layout structure
return Scaffold(
  backgroundColor: Colors.black,
  body: SafeArea(
    child: Container(
      width: double.infinity,
      height: MediaQuery.of(context).size.height,
      child: Stack(
        children: [
          Positioned.fill(
            child: Container(
              decoration: BoxDecoration(
                gradient: LinearGradient(
                  begin: Alignment.topCenter,
                  end: Alignment.bottomCenter,
                  colors: [
                    Colors.black,
                    Colors.grey.withOpacity(0.1),
                    Colors.black,
                  ],
                ),
            ),
          ),
        ],
      ),
    ),
  ),
);

```

```

        child: CustomPaint(
          painter: TradingChartPainter(),
        ),
      ),
    ),
  Center(
    child: Container(
      width: MediaQuery.of(context).size.width * 0.9,
      constraints: BoxConstraints(
        maxWidth: 390,
        minHeight: MediaQuery.of(context).size.height * 0.8,
      ),
      child: Column(
        mainAxisAlignment: MainAxisAlignment.center,
        children: [
          Expanded(
            flex: 2,
            child: Container(
              width: double.infinity,
              decoration: BoxDecoration(
                gradient: LinearGradient(
                  begin: Alignment.topLeft,
                  end: Alignment.bottomRight,
                  colors: [
                    Colors.blue.withOpacity(0.1),
                    Colors.transparent,
                  ],
                ),
            ),
          ),
          child: Stack(
            children: [
              CustomPaint(
                painter: TradingChartPainter(),
                size: Size.infinite,
              ),
              Positioned(
                bottom: 20,
                right: 40,
                child: Container(
                  width: 80,
                  height: 60,
                  decoration: BoxDecoration(
                    gradient: LinearGradient(
                      begin: Alignment.topLeft,
                      end: Alignment.bottomRight,
                      colors: [
                        Colors.amber.withOpacity(0.8),
                        Colors.orange.withOpacity(0.6),
                      ],
                    ),
                  ),
                  borderRadius: BorderRadius.circular(8),
                  boxShadow: [
                    BoxShadow(
                      color: Colors.black.withOpacity(0.3),

```

```

        blurRadius: 10,
        offset: Offset(0, 5),
      ),
    ],
  ),
  child: Icon(
    Icons.monetization_on_outlined,
    color: Colors.white,
    size: 40,
  ),
),
],
),
),
),
Container(
  width: double.infinity,
  padding: EdgeInsets.all(32),
  decoration: BoxDecoration(
    color: Color(0xFF1A1A1A),
    borderRadius: BorderRadius.circular(12),
    border: Border.all(
      color: Colors.grey.withOpacity(0.2),
      width: 1,
    ),
  ),
  child: Column(
    crossAxisAlignment: CrossAxisAlignment.start,
    mainAxisAlignment: MainAxisAlignment.min,
    children: [
      Text(
        'Welcome back',
        style: TextStyle(
          color: Colors.white,
          fontSize: 24,
          fontWeight: FontWeight.w600,
        ),
      ),
      SizedBox(height: 32),
      Container(
        decoration: BoxDecoration(
          color: Color(0xFF2A2A2A),
          borderRadius: BorderRadius.circular(8),
          border: Border.all(
            color: Colors.grey.withOpacity(0.3),
            width: 1,
          ),
        ),
        child: TextField(
          controller: _emailController,
          style: TextStyle(color: Colors.white),
          decoration: InputDecoration(

```

```

        hintText: 'Email',
        hintStyle: TextStyle(
          color: Colors.grey,
          fontSize: 16,
        ),
        border: InputBorder.none,
        contentPadding: EdgeInsets.symmetric(
          horizontal: 16,
          vertical: 16,
        ),
      ),
    ),
    keyboardType: TextInputType.emailAddress,
  ),
),
SizedBox(height: 16),
Container(
  decoration: BoxDecoration(
    color: Color(0xFF2A2A2A),
    borderRadius: BorderRadius.circular(8),
    border: Border.all(
      color: Colors.grey.withOpacity(0.3),
      width: 1,
    ),
  ),
),
// User input field

child: TextField(
  controller: _passwordController,
  style: TextStyle(color: Colors.white),
  obscureText: !_isPasswordVisible,
  decoration: InputDecoration(
    hintText: 'Password',
    hintStyle: TextStyle(
      color: Colors.grey,
      fontSize: 16,
    ),
    border: InputBorder.none,
    contentPadding: EdgeInsets.symmetric(
      horizontal: 16,
      vertical: 16,
    ),
    suffixIcon: IconButton(
      icon: Container(
        padding: EdgeInsets.all(2),
        decoration: BoxDecoration(
          color: Colors.white.withOpacity(0.1),
          borderRadius: BorderRadius.circular(4),
        ),
        child: Icon(
          _isPasswordVisible
            ? Icons.visibility_off
            : Icons.visibility,
          color: Colors.grey,
          size: 16,
        ),
      ),
    ),
  ),
),

```

```

        ),
        onPressed: () {
// Notify Flutter that the internal state has changed
          setState(() {
            _isPasswordVisible = !_isPasswordVisible;
          });
        },
      ),
    ),
  ),
  SizedBox(height: 16),
  Row(
    children: [
      Transform.scale(
        scale: 0.8,
        child: Checkbox(
          value: _rememberMe,
          onChanged: (value) {
// Notify Flutter that the internal state has changed
            setState(() {
              _rememberMe = value ?? false;
            });
          },
          activeColor: Color(0xFF007AFF),
          checkColor: Colors.white,
          side: BorderSide(
            color: Colors.grey,
            width: 1,
          ),
        ),
      ),
      Text(
        'Remember me',
        style: TextStyle(
          color: Colors.grey,
          fontSize: 14,
        ),
      ),
    ],
  ),
  SizedBox(height: 24),
  Container(
    width: double.infinity,
    height: 48,
// A material design styled button
    child: ElevatedButton(
      onPressed: _handleSignIn,
// A material design styled button
      style: ElevatedButton.styleFrom(
        backgroundColor: Color(0xFF007AFF),
        foregroundColor: Colors.white,
        elevation: 0,
        shape: RoundedRectangleBorder(

```

```

        borderRadius: BorderRadius.circular(8),
      ),
    ),
    child: Text(
      'Sign In',
      style: TextStyle(
        fontSize: 16,
        fontWeight: FontWeight.w500,
      ),
    ),
  ),
  SizedBox(height: 16),
  Center(
    child: TextButton(
      onPressed: _handleForgotPassword,
      child: Text(
        'Forgot Password?',
        style: TextStyle(
          color: Colors.grey,
          fontSize: 14,
        ),
      ),
    ),
  ),
  SizedBox(height: 8),
  Center(
    child: TextButton(
      onPressed: _handleSignUp,
      child: Text(
        'Sign Up',
        style: TextStyle(
          color: Colors.grey,
          fontSize: 14,
        ),
      ),
    ),
  ),
  SizedBox(height: 24),
  Center(
    child: Text(
      'Secured by reCAPTCHA and HTTPS',
      style: TextStyle(
        color: Colors.grey.withOpacity(0.6),
        fontSize: 12,
      ),
    ),
  ),
  ],
),
SizedBox(height: 40),
],
),

```



```

        ),
    ),
],
),
),
),
);
}
}

// A widget that holds mutable state
class SignUpDialog extends StatefulWidget {
  @override
  _SignUpDialogState createState() => _SignUpDialogState();
}

class _SignUpDialogState extends State<SignUpDialog> {
  // Controller to handle text input
  final TextEditingController _nameController = TextEditingController();
  // Controller to handle text input
  final TextEditingController _phoneController = TextEditingController();
  // Controller to handle text input
  final TextEditingController _emailController = TextEditingController();
  // Controller to handle text input
  final TextEditingController _passwordController = TextEditingController();
  bool _isPasswordVisible = false;

  @override
  void dispose() {
    _nameController.dispose();
    _phoneController.dispose();
    _emailController.dispose();
    _passwordController.dispose();
    super.dispose();
  }

  void _handleSignUp() {
    if (_nameController.text.isEmpty ||
        _phoneController.text.isEmpty ||
        _emailController.text.isEmpty ||
        _passwordController.text.isEmpty) {
      showDialog(
        context: context,
        builder: (BuildContext context) {
          return AlertDialog(
            backgroundColor: Color(0xFFf1E1E1),
            title: Text(
              'Error',
              style: TextStyle(color: Colors.red),
            ),
            content: Text(
              'Please fill in all fields.',
              style: TextStyle(color: Colors.white70),
            ),
          ),
        ),
      );
    }
  }
}

```

```

        actions: [
            TextButton(
                onPressed: () => Navigator.of(context).pop(),
                child: Text(
                    'OK',
                    style: TextStyle(color: Color(0xFF007AFF)),
                ),
            ),
        ],
    );
},
);
return;
}

Navigator.of(context).pop();

showDialog(
    context: context,
    builder: (BuildContext context) {
        return AlertDialog(
            backgroundColor: Color(0xFF1E1E1E),
            title: Text(
                'Sign Up Successful',
                style: TextStyle(color: Colors.green),
            ),
            content: Text(
                'Welcome ${_nameController.text}!\n\nYour account has been created\n\nName:  ${_nameController.text}\nPhone:  ${_phoneController.text}\nEmail:  ${_emailController.text}',
                style: TextStyle(color: Colors.white70),
            ),
            actions: [
                TextButton(
                    onPressed: () => Navigator.of(context).pop(),
                    child: Text(
                        'Continue',
                        style: TextStyle(color: Color(0xFF007AFF)),
                    ),
                ),
            ],
        );
    },
);
}

@override
Widget build(BuildContext context) {
    return Dialog(
        backgroundColor: Color(0xFF1E1E1E),
        shape: RoundedRectangleBorder(
            borderRadius: BorderRadius.circular(12),
        ),
        child: Container(

```

```

width: MediaQuery.of(context).size.width * 0.9,
constraints: BoxConstraints(maxWidth: 400),
padding: EdgeInsets.all(24),
child: Column(
  mainAxisAlignment: MainAxisAlignment.min,
  crossAxisAlignment: CrossAxisAlignment.start,
  children: [
    Text(
      'Create Account',
      style: TextStyle(
        color: Colors.white,
        fontSize: 24,
        fontWeight: FontWeight.w600,
      ),
    ),
    SizedBox(height: 24),
// User input field
    _buildTextField(
      controller: _nameController,
      hintText: 'Full Name',
      keyboardType: TextInputType.name,
    ),
    SizedBox(height: 16),
// User input field
    _buildTextField(
      controller: _phoneController,
      hintText: 'Phone Number',
      keyboardType: TextInputType.phone,
    ),
    SizedBox(height: 16),
// User input field
    _buildTextField(
      controller: _emailController,
      hintText: 'Email',
      keyboardType: TextInputType.emailAddress,
    ),
    SizedBox(height: 16),
    Container(
      decoration: BoxDecoration(
        color: Color(0xFF2A2A2A),
        borderRadius: BorderRadius.circular(8),
        border: Border.all(
          color: Colors.grey.withOpacity(0.3),
          width: 1,
        ),
      ),
    ),
// User input field
    child: TextField(
      controller: _passwordController,
      style: TextStyle(color: Colors.white),
      obscureText: !_isPasswordVisible,
      decoration: InputDecoration(
        hintText: 'Password',
        hintStyle: TextStyle(

```

```

        color: Colors.grey,
        fontSize: 16,
      ),
      border: InputBorder.none,
      contentPadding: EdgeInsets.symmetric(
        horizontal: 16,
        vertical: 16,
      ),
      suffixIcon: IconButton(
        icon: Container(
          padding: EdgeInsets.all(2),
          decoration: BoxDecoration(
            color: Colors.white.withOpacity(0.1),
            borderRadius: BorderRadius.circular(4),
          ),
          child: Icon(
            _isPasswordVisible
              ? Icons.visibility_off
              : Icons.visibility,
            color: Colors.grey,
            size: 16,
          ),
        ),
        onPressed: () {
          // Notify Flutter that the internal state has changed
          setState(() {
            _isPasswordVisible = !_isPasswordVisible;
          });
        },
      ),
    ),
  ),
  SizedBox(height: 24),
  Container(
    width: double.infinity,
    height: 48,
    // A material design styled button
    child: ElevatedButton(
      onPressed: _handleSignUp,
      // A material design styled button
      style: ElevatedButton.styleFrom(
        backgroundColor: Color(0xFF007AFF),
        foregroundColor: Colors.white,
        elevation: 0,
        shape: RoundedRectangleBorder(
          borderRadius: BorderRadius.circular(8),
        ),
      ),
      child: Text(
        'Sign Up',
        style: TextStyle(
          fontSize: 16,
          fontWeight: FontWeight.w500,

```

```

        ),
      ),
    ),
  ),
  SizedBox(height: 16),
  Container(
    width: double.infinity,
    height: 48,
    child: TextButton(
      onPressed: () => Navigator.of(context).pop(),
      child: Text(
        'Cancel',
        style: TextStyle(
          color: Colors.grey,
          fontSize: 16,
        ),
      ),
    ),
  ),
),
),
1,
),
);
}

```

```

// User input field
Widget _buildTextField({
// Controller to handle text input
  required TextEditingController controller,
  required String hintText,
  required TextInputType keyboardType,
}) {
  return Container(
    decoration: BoxDecoration(
      color: Color(0xFF2A2A2A),
      borderRadius: BorderRadius.circular(8),
      border: Border.all(
        color: Colors.grey.withOpacity(0.3),
        width: 1,
      ),
    ),
  ),
// User input field
  child: TextField(
    controller: controller,
    style: TextStyle(color: Colors.white),
    decoration: InputDecoration(
      hintText: hintText,
      hintStyle: TextStyle(
        color: Colors.grey,
        fontSize: 16,
      ),
    ),
    border: InputBorder.none,
    contentPadding: EdgeInsets.symmetric(
      horizontal: 16,
    ),
  ),
);
}

```

```

        vertical: 16,
    ),
),
keyboardType: keyboardType,
),
);
}
}

```

```

class TradingChartPainter extends CustomPainter {
    @override
    void paint(Canvas canvas, Size size) {
        final paint = Paint()
            ..strokeWidth = 2
            ..style = PaintingStyle.stroke;

        final Random random = Random(42);
        final double candleWidth = size.width / 20;

        for (int i = 0; i < 20; i++) {
            final double x = i * candleWidth + candleWidth / 2;
            final double high = random.nextDouble() * size.height * 0.4 + size.height * 0.1;
            final double low = high + random.nextDouble() * size.height * 0.2;
            final double open = high + random.nextDouble() * (low - high);
            final double close = high + random.nextDouble() * (low - high);

            final bool isGreen = close > open;
            paint.color = isGreen ? Colors.green : Colors.red;

            canvas.drawLine(
                Offset(x, high),
                Offset(x, low),
                paint,
            );

            paint.style = PaintingStyle.fill;
            canvas.drawRect(
                Rect.fromLTRB(
                    x - candleWidth * 0.3,
                    isGreen ? close : open,
                    candleWidth * 0.6,
                    (isGreen ? open - close : close - open).abs(),
                ),
                paint,
            );
            paint.style = PaintingStyle.stroke;
        }
    }

    @override
    bool shouldRepaint(covariant CustomPainter oldDelegate) => false;
}

```

## proversion.dart

```
import 'package:flutter/material.dart';

// Entry point of the Flutter app
void main() {
  // Launches the main widget of the app
  runApp(const MyApp());
}

// A widget that doesn't hold mutable state
class MyApp extends StatelessWidget {
  const MyApp({super.key});

  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      title: 'Upgrade to Pro',
      theme: ThemeData.dark(),
      home: const ProVersionPurchasePage(),
    );
  }
}

// A widget that doesn't hold mutable state
class ProVersionPurchasePage extends StatelessWidget {
  const ProVersionPurchasePage({super.key});

  @override
  Widget build(BuildContext context) {
    // Provides the basic material design visual layout structure
    return Scaffold(
      // Top bar of the app screen
      appBar: AppBar(
        title: const Text('Upgrade to Pro'),
      ),
      body: SingleChildScrollView(
        padding: const EdgeInsets.all(16.0),
        child: Column(
          crossAxisAlignment: CrossAxisAlignment.start,
          children: [
            const Text(
              'Unlock Pro Features',
              style: TextStyle(fontSize: 24, fontWeight: FontWeight.bold),
            ),
            const SizedBox(height: 16),
            const Text(
              'Get real-time stock alerts, advanced analytics, an ad-free experience, and priority support.',
              style: TextStyle(fontSize: 16),
            ),
            const SizedBox(height: 24),
            const ProFeaturesCard(),
            const SizedBox(height: 24),
          ],
        ),
      ),
    );
  }
}
```

```

        const Text(
          'Pricing Plans',
          style: TextStyle(fontSize: 20, fontWeight: FontWeight.bold),
        ),
        const SizedBox(height: 16),
        const PricingPlansCard(),
      ],
    ),
  ),
);
}

// A widget that doesn't hold mutable state
class ProFeaturesCard extends StatelessWidget {
  const ProFeaturesCard({super.key});

  @override
  Widget build(BuildContext context) {
    return Card(
      shape: RoundedRectangleBorder(
        borderRadius: BorderRadius.circular(10.0),
      ),
      elevation: 4,
      child: Padding(
        padding: const EdgeInsets.all(16.0),
        child: Column(
          children: const [
            FeatureListTile(
              icon: Icons.notifications_active,
              title: 'Real-time Stock Alerts',
              subtitle: 'Get instant notifications for stock price changes.',
            ),
            FeatureListTile(
              icon: Icons.analytics,
              title: 'Advanced Analytics',
              subtitle: 'Access in-depth analysis tools for better investment
decisions.',
            ),
            FeatureListTile(
              icon: Icons.ad_units,
              title: 'Ad-Free Experience',
              subtitle: 'Enjoy an uninterrupted experience without ads.',
            ),
            FeatureListTile(
              icon: Icons.support_agent,
              title: 'Priority Support',
              subtitle: 'Receive faster and more personalized assistance.',
            ),
          ],
        ),
      ),
    );
  }
}

```



```
}
```

```
// A widget that doesn't hold mutable state
class FeatureListTile extends StatelessWidget {
  final IconData icon;
  final String title;
  final String subtitle;

  const FeatureListTile({
    super.key,
    required this.icon,
    required this.title,
    required this.subtitle,
  });

  @override
  Widget build(BuildContext context) {
    return ListTile(
      leading: Icon(icon, color: Colors.green),
      title: Text(title),
      subtitle: Text(subtitle),
    );
  }
}
```

```
// A widget that doesn't hold mutable state
class PricingPlansCard extends StatelessWidget {
  const PricingPlansCard({super.key});

  @override
  Widget build(BuildContext context) {
    return Card(
      shape: RoundedRectangleBorder(
        borderRadius: BorderRadius.circular(10.0),
      ),
      elevation: 4,
      child: Padding(
        padding: const EdgeInsets.all(16.0),
        child: Column(
          children: [
            const PricingOption(
              price: '\$9.99/month',
              period: 'Monthly',
              isBestValue: false,
            ),
            const SizedBox(height: 16),
            const PricingOption(
              price: '\$99.99/year',
              period: 'Yearly',
              isBestValue: true,
            ),
          ],
        ),
      ),
    );
  }
}
```

```

    );
  }
}

// A widget that doesn't hold mutable state
class PricingOption extends StatelessWidget {
  final String price;
  final String period;
  final bool isBestValue;

  const PricingOption({
    super.key,
    required this.price,
    required this.period,
    required this.isBestValue,
  });

  @override
  Widget build(BuildContext context) {
    return Container(
      padding: const EdgeInsets.all(16),
      decoration: BoxDecoration(
        borderRadius: BorderRadius.circular(8),
        border: Border.all(color: Colors.grey),
        color: isBestValue ? Colors.green.withOpacity(0.1) : Colors.transparent,
      ),
      child: Column(
        children: [
          Row(
            mainAxisAlignment: MainAxisAlignment.spaceBetween,
            children: [
              Text(
                period,
                style: const TextStyle(fontSize: 18, fontWeight: FontWeight.bold),
              ),
              if (isBestValue)
                Container(
                  padding: const EdgeInsets.symmetric(horizontal: 8, vertical: 4),
                  decoration: BoxDecoration(
                    color: Colors.green,
                    borderRadius: BorderRadius.circular(12),
                  ),
                  child: const Text(
                    'Best Value',
                    style: TextStyle(color: Colors.white, fontSize: 12),
                  ),
                ),
            ],
          ),
          const SizedBox(height: 8),
          Text(
            price,
            style: const TextStyle(fontSize: 24, fontWeight: FontWeight.bold),
          ),
        ],
      ),
    );
  }
}

```

```

        const SizedBox(height: 16),
        SizedBox(
          width: double.infinity,
// A material design styled button
          child: ElevatedButton(
            onPressed: () {
              // Handle upgrade logic
            },
// A material design styled button
            style: ElevatedButton.styleFrom(
              backgroundColor: Colors.green,
              padding: const EdgeInsets.symmetric(vertical: 12),
            ),
            child: const Text('Upgrade Now'),
          ),
        ),
      ],
    ),
  );
}
}

```