MAD & PWA LAB Experiment 4

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Aim: To create an interactive Form using form widget.

```
Code:
Login page:
import
'package:country picker/country picker.d
                                               class LoginPage extends
art';
                                               ConsumerStatefulWidget {
import 'package:flutter/material.dart';
                                                const LoginPage({super.key});
import
'package:flutter riverpod/flutter riverpod
.dart';
                                                @override
import
                                                ConsumerState<LoginPage> createState()
'package:whatsapp_messenger/common/
                                               => _LoginPageState();
extension/custom_theme_extension.dart';
                                               }
import
'package:whatsapp_messenger/common/
helper/show_alert_dialog.dart';
                                               class LoginPageState extends
                                               ConsumerState<LoginPage> {
import
'package:whatsapp messenger/common/
                                                late TextEditingController
widgets/custom elevated button.dart';
                                               countryNameController;
import
                                                late TextEditingController
'package:whatsapp messenger/feature/a
                                               countryCodeController;
uth/controller/auth_controller.dart';
                                                late TextEditingController
import
                                               phoneNumberController;
'package:whatsapp_messenger/feature/a
uth/widgets/custom_text_field.dart';
                                                sendCodeToPhone() {
                                                 final phoneNumber =
import '../../common/utils/coloors.dart';
                                               phoneNumberController.text;
import
                                                 final countryName =
'../../common/widgets/custom_icon_bu
                                               countryNameController.text;
tton.dart';
```

```
final countryCode =
                                                     );
countryCodeController.text;
                                                 }
  if (phoneNumber.isEmpty) {
                                                  showCountryPickerBottomSheet() {
   return showAlertDialog(
                                                   showCountryPicker(
    context: context,
                                                    context: context,
    message: "Please enter your phone
                                                    showPhoneCode: true,
number",
                                                    favorite: ['ET'],
   );
                                                    countryListTheme:
  } else if (phoneNumber.length < 9) {
                                                 CountryListThemeData(
   return showAlertDialog(
                                                     bottomSheetHeight: 600,
    context: context,
                                                     backgroundColor:
                                                Theme.of(context).colorScheme.surface,
    message:
      'The phone number you entered is
                                                     flagSize: 22,
too short for the country:
                                                     borderRadius:
$countryName\n\nInclude your area code
                                                 BorderRadius.circular(20),
if you haven\'t',
                                                     textStyle: TextStyle(color:
   );
                                                context.theme.greyColor),
  } else if (phoneNumber.length > 10) {
                                                     inputDecoration: InputDecoration(
   return showAlertDialog(
                                                      labelStyle: TextStyle(color:
    context: context,
                                                context.theme.greyColor),
    message:
                                                      prefixIcon: const Icon(
      "The phone number you entered is
                                                       Icons.language,
too long for the country: $countryName",
                                                       color: Coloors.greenDark,
   );
                                                      ),
 }
                                                      hintText: 'Search country by code or
                                                 name',
                                                      enabledBorder:
  ref.read(authControllerProvider).sendS
                                                 UnderlineInputBorder(
msCode(
                                                       borderSide: BorderSide(
     context: context,
     phoneNumber:
"+$countryCode$phoneNumber",
                                                context.theme.greyColor!.withOpacity(.2),
```

```
),
                                                   void dispose() {
     ),
                                                    countryNameController.dispose();
     focusedBorder: const
                                                    countryCodeController.dispose();
UnderlineInputBorder(
                                                    phoneNumberController.dispose();
      borderSide: BorderSide(
                                                    super.dispose();
       color: Coloors.greenDark,
                                                   }
      ),
     ),
                                                   @override
    ),
                                                   Widget build(BuildContext context) {
                                                    return Scaffold(
   onSelect: (country) {
                                                     appBar: AppBar(
    countryNameController.text =
                                                      backgroundColor:
country.name;
                                                  Theme.of(context).scaffoldBackgroundCol
    countryCodeController.text =
                                                  or,
country.phoneCode;
                                                      elevation: 0,
   },
                                                      title: Text(
  );
                                                       'Enter your phone number',
 }
                                                       style: TextStyle(
                                                        color:
                                                  context.theme.authAppbarTextColor,
 @override
 void initState() {
                                                       ),
  countryNameController =
                                                      ),
TextEditingController(text: 'Ethiopia');
                                                      centerTitle: true,
  countryCodeController =
                                                      actions: [
TextEditingController(text: '251');
                                                       CustomIconButton(
  phoneNumberController =
TextEditingController();
                                                        onPressed: () {},
  super.initState();
                                                        icon: Icons.more vert,
 }
                                                       ),
                                                      ],
 @override
                                                     ),
```

```
body: Column(
                                                         child: CustomTextField(
    children: [
                                                          onTap:
                                                  showCountryPickerBottomSheet,
     Padding(
                                                          controller:
      padding: const
                                                  countryNameController,
EdgeInsets.symmetric(horizontal: 20,
vertical: 10),
                                                          readOnly: true,
      child: RichText(
                                                          suffixIcon: const Icon(
       textAlign: TextAlign.center,
                                                           Icons.arrow_drop_down,
       text: TextSpan(
                                                           color: Coloors.greenDark,
        text: 'WhatsApp will need to
                                                           size: 22,
verify your number. ',
                                                          ),
         style: TextStyle(
                                                         ),
          color: context.theme.greyColor,
                                                        ),
         height: 1.5,
                                                        const SizedBox(height: 10),
         ),
                                                        Padding(
         children: [
                                                         padding: const
         TextSpan(
                                                  EdgeInsets.symmetric(horizontal: 50),
           text: "What's my number?",
                                                         child: Row(
           style: TextStyle(
                                                          children: [
            color:
                                                           SizedBox(
context.theme.blueColor,
                                                            width: 70,
           ),
                                                            child: CustomTextField(
         ),
                                                             onTap:
        ],
                                                  showCountryPickerBottomSheet,
       ),
                                                             controller:
                                                  countryCodeController,
      ),
                                                             prefixText: '+',
     ),
                                                             readOnly: true,
     const SizedBox(height: 10),
                                                            ),
     Padding(
                                                           ),
      padding: const
EdgeInsets.symmetric(horizontal: 50),
                                                           const SizedBox(width: 10),
```

```
Expanded(
                                                        color: context.theme.greyColor,
         child: CustomTextField(
                                                       ),
          controller:
                                                      ),
phoneNumberController,
                                                     ],
          hintText: 'phone number',
                                                    ),
          textAlign: TextAlign.left,
                                                    floatingActionButtonLocation:
          keyboardType:
                                                 FloatingActionButtonLocation.centerFloat,
TextInputType.number,
                                                    floatingActionButton:
         ),
                                                 CustomElevatedButton(
        ),
                                                     onPressed: sendCodeToPhone,
       1,
                                                     text: 'NEXT',
                                                     buttonWidth: 90,
      ),
     ),
                                                    ),
     const SizedBox(height: 20),
                                                   );
     Text(
                                                  }
      'Carrier charges may apply',
                                                 }
      style: TextStyle(
Verification page:
import 'package:flutter/material.dart';
                                                 class VerificationPage extends
                                                 ConsumerWidget {
import
'package:flutter riverpod/flutter riverpod
                                                  const VerificationPage({
.dart';
                                                   super.key,
import
                                                   required this.smsCodeId,
'package:whatsapp messenger/common/
extension/custom_theme_extension.dart';
                                                   required this.phoneNumber,
import
                                                  });
'package:whatsapp messenger/feature/a
uth/controller/auth_controller.dart';
                                                  final String smsCodeId;
import
'package:whatsapp messenger/feature/a
                                                  final String phoneNumber;
```

uth/widgets/custom text field.dart';

```
Future<void> verifySmsCode(
                                                      actions: [
  BuildContext context,
                                                       IconButton(
  WidgetRef ref,
                                                         onPressed: () {},
  String smsCode,
                                                         icon: const lcon(lcons.more vert),
 ) async {
                                                       ),
                                                      ],
  await
ref.read(authControllerProvider).verifySms
                                                     ),
Code(
                                                     body: SingleChildScrollView(
     context: context,
                                                       padding: const
     smsCodeId: smsCodeId,
                                                  EdgeInsets.symmetric(horizontal: 20),
     smsCode: smsCode,
                                                       child: Column(
    );
                                                        children: [
 }
                                                         Padding(
                                                          padding: const
                                                  EdgeInsets.symmetric(horizontal: 10),
 @override
 Widget build(BuildContext context,
                                                          child: RichText(
WidgetRef ref) {
                                                           textAlign: TextAlign.center,
  return Scaffold(
                                                           text: TextSpan(
   appBar: AppBar(
                                                            style: TextStyle(color:
    backgroundColor:
                                                  context.theme.greyColor),
Theme.of(context).scaffoldBackgroundCol
                                                            children: [
or,
                                                             const TextSpan(
    elevation: 0,
                                                              text:
    centerTitle: true,
                                                                 "You've tried to register
    title: Text(
                                                  before requesting an SMS or Call with your
     'Verify your number',
                                                  code.",
                                                             ),
     style: TextStyle(
      color:
                                                             TextSpan(
context.theme.authAppbarTextColor,
                                                              text: "Wrong number?",
     ),
                                                              style: TextStyle(
    ),
```

```
color:
                                                          ),
context.theme.blueColor,
                                                          const SizedBox(height: 30),
            ),
                                                          Row(
           ),
                                                           children: [
          ],
                                                            Icon(Icons.message, color:
         ),
                                                   context.theme.greyColor),
       ),
                                                            const SizedBox(width: 20),
      ),
                                                            Text(
      const SizedBox(height: 20),
                                                             'Resend SMS',
      Container(
                                                             style: TextStyle(
       padding: const
                                                              color: context.theme.greyColor,
EdgeInsets.symmetric(horizontal: 80),
                                                             ),
       child: CustomTextField(
                                                            ),
         hintText: "- - - - - -",
                                                           1,
         fontSize: 30,
                                                          ),
         autoFocus: true,
                                                          const SizedBox(height: 10),
         keyboardType:
                                                          Divider(
TextInputType.number,
                                                           color:
         onChanged: (value) async {
                                                   context.theme.greyColor!.withOpacity(.2),
          if (value.length == 6) {
                                                          ),
           await verifySmsCode(context,
                                                          const SizedBox(height: 10),
ref, value);
                                                          Row(
          }
                                                           children: [
         },
                                                            Icon(Icons.phone, color:
       ),
                                                   context.theme.greyColor),
                                                            const SizedBox(width: 20),
      const SizedBox(height: 20),
                                                            Text(
      Text(
                                                             'Call Me',
        'Enter 6-digit code',
                                                             style: TextStyle(
       style: TextStyle(color:
                                                              color: context.theme.greyColor,
context.theme.greyColor),
```

```
),
                                                   ),
        ),
                                                  ),
       ],
                                                 );
      ),
                                                }
     1,
                                               }
User_Info page:
import 'dart:io';
                                               import
                                               'package:whatsapp messenger/feature/a
import 'dart:typed_data';
                                               uth/controller/auth_controller.dart';
                                               import
import 'package:flutter/material.dart';
                                               'package:whatsapp_messenger/feature/a
                                               uth/pages/image_picker_page.dart';
import
'package:flutter_riverpod/flutter_riverpod
                                               import
                                               'package:whatsapp_messenger/feature/a
.dart';
                                               uth/widgets/custom_text_field.dart';
import
'package:image_picker/image_picker.dart'
                                               class UserInfoPage extends
import
                                               ConsumerStatefulWidget {
'package:whatsapp_messenger/common/
                                                const UserInfoPage({super.key,
extension/custom_theme_extension.dart';
                                               this.profileImageUrl});
import
'package:whatsapp_messenger/common/
helper/show_alert_dialog.dart';
                                                final String? profileImageUrl;
import
'package:whatsapp_messenger/common/
                                                @override
utils/coloors.dart';
                                                ConsumerState<UserInfoPage>
import
                                               createState() => _UserInfoPageState();
'package:whatsapp_messenger/common/
widgets/custom_elevated_button.dart';
                                               }
import
'package:whatsapp_messenger/common/
                                               class UserInfoPageState extends
widgets/custom_icon_button.dart';
                                               ConsumerState<UserInfoPage> {
import
                                                File? imageCamera;
'package:whatsapp messenger/common/
widgets/short_h_bar.dart';
                                                Uint8List? imageGallery;
```

```
late TextEditingController
                                                    return;
usernameController;
                                                   }
 @override
                                                   await
 void initState() {
                                                 ref.read(authControllerProvider).saveUserI
                                                 nfoToFirestore(
 super.initState();
                                                       username: username,
  usernameController =
TextEditingController();
                                                       profileImage:
 }
                                                         imageCamera ?? imageGallery ??
                                                 widget.profileImageUrl ?? ",
                                                      context: context,
 @override
                                                     );
 void dispose() {
                                                  }
 usernameController.dispose();
 super.dispose();
                                                  void imagePickerTypeBottomSheet() {
 }
                                                   showModalBottomSheet(
                                                    context: context,
 Future<void> saveUserDataToFirebase()
async {
                                                    builder: (context) {
                                                      return Padding(
  String username =
usernameController.text.trim();
                                                       padding: const
                                                 EdgeInsets.symmetric(vertical: 10),
  if (username.isEmpty) {
                                                       child: Column(
   showAlertDialog(context: context,
                                                        mainAxisSize: MainAxisSize.min,
message: 'Please provide a username');
                                                        children: [
   return;
                                                         const ShortHBar(),
 }
                                                         Padding(
  if (username.length < 3 ||
                                                          padding: const
username.length > 20) {
                                                 EdgeInsets.symmetric(horizontal: 20),
   showAlertDialog(
                                                          child: Row(
     context: context, message:
                                                           children: [
'Username length should be between 3-
20');
                                                            const Text(
```

```
'Profile photo',
                                                           ),
            style:
                                                          ],
              TextStyle(fontSize: 20,
                                                         ),
fontWeight: FontWeight.w500),
                                                        1,
           ),
                                                       ),
           const Spacer(),
                                                      );
           CustomIconButton(
                                                    },
            onPressed: () =>
                                                   );
Navigator.pop(context),
                                                  }
            icon: Icons.close,
          ),
                                                  Future<void>pickImageFromCamera()
         1,
                                                 async {
        ),
                                                   Navigator.pop(context);
       ),
                                                   final image = await
       Divider(color:
                                                 ImagePicker().pickImage(source:
context.theme.greyColor!.withOpacity(.3))
                                                 ImageSource.camera);
                                                   if (image != null) {
       Row(
                                                    setState(() {
        mainAxisAlignment:
                                                      imageCamera = File(image.path);
MainAxisAlignment.spaceEvenly,
                                                      imageGallery = null;
        children: [
                                                    });
         imagePickerIcon(
                                                   }
           onTap: pickImageFromCamera,
                                                  }
           icon:
Icons.camera_alt_rounded,
          text: 'Camera',
                                                  Future<void> pickImageFromGallery()
                                                 async {
         ),
                                                   Navigator.pop(context);
         imagePickerIcon(
                                                   final image = await Navigator.push(
           onTap: pickImageFromGallery,
                                                    context,
           icon:
lcons.photo_camera_back_rounded,
                                                     MaterialPageRoute(builder: (context)
                                                 => const ImagePickerPage()),
           text: 'Gallery',
```

```
);
                                                   }
  if (image != null) {
                                                   @override
   setState(() {
    imageGallery = image;
                                                   Widget build(BuildContext context) {
    imageCamera = null;
                                                    return Scaffold(
   });
                                                      appBar: AppBar(
  }
                                                       backgroundColor:
                                                  Theme.of(context).colorScheme.surface,
 }
                                                       elevation: 0,
                                                       title: Text(
 Widget imagePickerIcon({
                                                        'Profile info',
  required VoidCallback onTap,
                                                        style: TextStyle(color:
  required IconData icon,
                                                  context.theme.authAppbarTextColor),
  required String text,
                                                      ),
 }) {
                                                       centerTitle: true,
  return Column(
                                                      ),
   children: [
                                                      body: SingleChildScrollView(
    CustomIconButton(
                                                       padding: const
                                                  EdgeInsets.symmetric(horizontal: 20),
     onPressed: onTap,
                                                       child: Column(
     icon: icon,
     iconColor: Coloors.greenDark,
                                                        children: [
     minWidth: 50,
                                                         Text(
     border: Border.all(color:
                                                          'Please provide your name and an
context.theme.greyColor!.withOpacity(.2))
                                                  optional profile photo',
                                                          textAlign: TextAlign.center,
    ),
                                                          style: TextStyle(color:
    const SizedBox(height: 5),
                                                  context.theme.greyColor),
    Text(text, style: TextStyle(color:
                                                         ),
context.theme.greyColor)),
                                                         const SizedBox(height: 40),
   ],
                                                         GestureDetector(
  );
```

```
onTap:
imagePickerTypeBottomSheet,
                                                  FileImage(imageCamera!) as
                                                 ImageProvider,
       child: Container(
        padding: const EdgeInsets.all(26),
                                                              : null,
        decoration: BoxDecoration(
                                                          ),
          shape: BoxShape.circle,
                                                          child: Icon(
          color:
context.theme.photoIconBgColor,
                                                           Icons.add a photo rounded,
          border: Border.all(
                                                           size: 48,
           color: (imageCamera == null
                                                           color: (imageCamera == null &&
&&
                                                                imageGallery == null &&
               imageGallery == null &&
                                                                widget.profileImageUrl ==
               widget.profileImageUrl ==
                                                 null)
null)
             ? Colors.transparent
                                                 context.theme.photoIconColor
                                                              : Colors.transparent,
context.theme.greyColor!.withOpacity(.4),
                                                          ),
         ),
                                                         ),
          image: (imageCamera != null ||
                                                        ),
              imageGallery != null ||
                                                        const SizedBox(height: 40),
              widget.profileImageUrl !=
                                                        CustomTextField(
null)
                                                          controller: usernameController,
            ? DecorationImage(
                                                          hintText: 'Type your name here',
              fit: BoxFit.cover,
                                                          autoFocus: true),
              image: imageGallery != null
                                                       1,
MemoryImage(imageGallery!)
                                                     ),
                : widget.profileImageUrl
!= null
                                                    floatingActionButton:
                                                 CustomElevatedButton(
                   ?
NetworkImage(widget.profileImageUrl!)
                                                      onPressed: saveUserDataToFirebase,
                                                 text: 'NEXT', buttonWidth: 90),
                                                   );
```

Output:









