

Assignment

**AIM- Smart Tourist Safety Monitoring & Incident
Response System**

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Smart Tourist Safety Monitoring & Incident Response

MainActivity.kt

```
package com.bytemap.a24172012068_assignment

import android.os.Bundle
import androidx.activity.ComponentActivity
import androidx.activity.compose.setContent
import androidx.activity.enableEdgeToEdge
import androidx.compose.foundation.layout.padding
import androidx.compose.material.icons.Icons
import androidx.compose.material.icons.filled.Contacts
import androidx.compose.material.icons.filled.Description
import androidx.compose.material.icons.filled.LocationOn
import androidx.compose.material.icons.filled.MonitorHeart
import androidx.compose.material.icons.filled.Notifications
import androidx.compose.material.icons.filled.Settings
import androidx.compose.material3.*
import androidx.compose.runtime.Composable
import androidx.compose.runtime.rememberCoroutineScope
import androidx.compose.ui.Modifier
import androidx.compose.ui.tooling.preview.Preview
import androidx.navigation.compose.NavHost
import androidx.navigation.compose.composable
import androidx.navigation.compose.currentBackStackEntryAsState
import androidx.navigation.compose.rememberNavController
import com.bytemap.a24172012068_assignment.components.AppBar
import com.bytemap.a24172012068_assignment.components.BottomBar
import com.bytemap.a24172012068_assignment.components.NavDrawer
import com.bytemap.a24172012068_assignment.components.NavMenuItem
import com.bytemap.a24172012068_assignment.screen.AlertsScreen
import com.bytemap.a24172012068_assignment.screen.Dashboard
import com.bytemap.a24172012068_assignment.screen.DangerZoneScreen
import com.bytemap.a24172012068_assignment.screen.EFirScreen
import com.bytemap.a24172012068_assignment.screen.EmergencyContactsScreen
import com.bytemap.a24172012068_assignment.screen.EmergencySOSScreen
import com.bytemap.a24172012068_assignment.screen.LocationHistoryScreen
import com.bytemap.a24172012068_assignment.screen.SOSSuccessScreen
import com.bytemap.a24172012068_assignment.screen.MapScreen
import com.bytemap.a24172012068_assignment.screen.NotificationsScreen
import com.bytemap.a24172012068_assignment.screen.ProfileScreen
import com.bytemap.a24172012068_assignment.screen.SafetyTipsScreen
import com.bytemap.a24172012068_assignment.screen.ServicesScreen
import com.bytemap.a24172012068_assignment.screen.SettingsScreen
import com.bytemap.a24172012068_assignment.screen.TripMonitorScreen
import kotlinx.coroutines.launch

class MainActivity : ComponentActivity() {
```

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```
override fun onCreate(savedInstanceState: Bundle?) {
    super.onCreate(savedInstanceState)
    enableEdgeToEdge()
    setContent {
        MaterialTheme {
            MainApp()
        }
    }
}

@Composable
fun MainApp() {
    val navController = rememberNavController()
    val drawerState = rememberDrawerState(DrawerValue.Closed)
    val scope = rememberCoroutineScope()

    val userName = "PRATHAM RAJBHAR"
    val userId = "46a08ef58a11b7f86bcb9a8d97c4ac95"

    val menuItems = listOf(
        NavMenuItem("Notifications", "notifications",
Icons.Default.Notifications, false),
        NavMenuItem("File E-FIR", "efir", Icons.Default.Description,
false),
        NavMenuItem("Trip Monitor", "trip_monitor",
Icons.Default.MonitorHeart, false),
        NavMenuItem("Location History", "location_history",
Icons.Default.LocationOn, false),
        NavMenuItem("Emergency Contacts", "emergency_contacts",
Icons.Default.Contacts, false),
        NavMenuItem("Settings", "settings", Icons.Default.Settings, false)
    )

    ModalNavigationDrawer(
        drawerState = drawerState,
        drawerContent = {
            NavDrawer(
                userName = userName,
                userId = userId,
                menuItems = menuItems.map {
                    it.copy(selected =
navController.currentBackStackEntryAsState().value?.destination?.route ==
it.route)
                },
                onItemClick = { route ->
```

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```
        navController.navigate(route) {
            popUpTo(navController.graph.startDestinationId) {
                saveState = true }
            launchSingleTop = true
            restoreState = true
        }
        scope.launch { drawerState.close() }
    },
    onLogout = {
    }
)
}
) {
    val currentBackStack = navController.currentBackStackEntryAsState().value
    val currentRoute = currentBackStack.value?.destination?.route ?: "dashboard"

    val bottomBarTitles = mapOf(
        "dashboard" to "Home",
        "map" to "Map",
        "alerts" to "Alerts",
        "profile" to "Profile"
    )

    val currentTitle = bottomBarTitles[currentRoute]
        ?: menuItems.find { it.route == currentRoute }?.label
        ?: "App"
    val canPop = navController.previousBackStackEntry != null

    Scaffold(
        topBar = {
            AppBar(
                title = currentTitle,
                canPop = canPop,
                onNavIconClick = {
                    if (canPop) {
                        navController.popBackStack()
                    } else {
                        scope.launch { drawerState.open() }
                    }
                }
            )
        },
        bottomBar = {
            BottomBar(navController = navController)
        }
    )
}
```

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```
    }
    ) { innerPadding ->
        NavHost(
            navController = navController,
            startDestination = "dashboard",
            modifier = Modifier.padding(innerPadding)
        ) {
            composable("dashboard") { Dashboard(navController) }
            composable("map") { MapScreen() }
            composable("alerts") { AlertsScreen() }
            composable("notifications") {
NotificationsScreen(navController) }
            composable("profile") { ProfileScreen() }
            composable("efir") { EFirScreen(navController) }
            composable("trip_monitor") {
TripMonitorScreen(navController) }
            composable("location_history") {
LocationHistoryScreen(navController) }
            composable("emergency_contacts") {
EmergencyContactsScreen(navController) }
            composable("settings") { SettingsScreen(navController) }
            composable("emergency_sos") {
EmergencySOSScreen(navController) }
            composable("sos_sent") { SOSSuccessScreen(navController) }
            composable("safety_tips") {
SafetyTipsScreen(navController) }
            composable("services") { ServicesScreen(navController) }
            composable("danger_zone") {
DangerZoneScreen(navController) }
        }
    }
}
```

ActivitiesScreen.kt

```
package com.bytemap.a24172012068_assignment.screen
```

```
import androidx.compose.foundation.background
import androidx.compose.foundation.layout.*
import androidx.compose.foundation.lazy.LazyColumn
import androidx.compose.foundation.lazy.items
import androidx.compose.foundation.shape.RoundedCornerShape
import androidx.compose.material3.Divider
import androidx.compose.material3.MaterialTheme
import androidx.compose.material3.Text
import androidx.compose.runtime.Composable
import androidx.compose.ui.Alignment
```

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```
import androidx.compose.ui.Modifier
import androidx.compose.ui.draw.clip
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.tooling.preview.Preview
import androidx.compose.ui.unit.dp
import androidx.compose.ui.unit.sp

data class TripActivity(
    val time: String,
    val step: String,
    val coordinates: String,
)

@Composable
fun ActivitiesScreen(
    activities: List<TripActivity> = sampleActivities
) {
    Box(
        modifier = Modifier
            .fillMaxSize()
            .background(Color(0xFFF5F7FA))
    ) {
        LazyColumn(
            contentPadding = PaddingValues(16.dp),
            verticalArrangement = Arrangement.spacedBy(0.dp)
        ) {
            items(activities) { activity ->
                ActivityLogLineModern(activity)
                Divider(
                    modifier = Modifier.padding(vertical = 6.dp,
horizontal = 6.dp),
                    color = Color(0xFFE0E4EA),
                    thickness = 1.dp
                )
            }
        }
    }
}

@Composable
fun ActivityLogLineModern(activity: TripActivity) {
    Row(
        modifier = Modifier
            .fillMaxWidth()
            .padding(vertical = 6.dp),
    )
}
```

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```
        verticalAlignment = Alignment.CenterVertically
    ) {
        Box(
            modifier = Modifier
                .clip(RoundedCornerShape(16.dp))
                .background(Color(0xFF149EE7).copy(alpha = 0.08f))
                .padding(horizontal = 12.dp, vertical = 4.dp)
        ) {
            Text(
                text = activity.time,
                color = Color(0xFF149EE7),
                fontSize = 14.sp,
                fontWeight = FontWeight.Medium
            )
        }
        Spacer(Modifier.width(14.dp))
        Column {
            Text(
                text = activity.step,
                style = MaterialTheme.typography.bodyLarge.copy(fontWeight
= FontWeight.Bold)
            )
            Text(
                text = activity.coordinates,
                style = MaterialTheme.typography.bodySmall.copy(color =
Color(0xFF9197A6))
            )
        }
    }
}

val sampleActivities = listOf(
    TripActivity("08:30 AM", "Trip Started", "23.474803, 72.391667"),
    TripActivity("08:45 AM", "Stopped at Gas Station", "23.480000,
72.393000"),
    TripActivity("09:00 AM", "Reached Shanku's Water Park", "23.474803,
72.391667"),
    TripActivity("09:30 AM", "Rest Stop", "23.501234, 72.398888"),
)

@Preview(showBackground = true)
@Composable
fun ActivitiesScreenPreview() {
    ActivitiesScreen()
}
```

AlertsScreen.kt

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```
package com.bytemap.a24172012068_assignment.screen
```

```
import androidx.compose.foundation.background
import androidx.compose.foundation.layout.*
import androidx.compose.foundation.lazy.LazyColumn
import androidx.compose.foundation.lazy.items
import androidx.compose.material.icons.Icons
import androidx.compose.material.icons.filled.Campaign
import androidx.compose.material.icons.filled.HealthAndSafety
import androidx.compose.material.icons.filled.LocalFireDepartment
import androidx.compose.material.icons.filled.Traffic
import androidx.compose.material3.Card
import androidx.compose.material3.CardDefaults
import androidx.compose.material3.Divider
import androidx.compose.material3.Icon
import androidx.compose.material3.Text
import androidx.compose.runtime.Composable
import androidx.compose.ui.Modifier
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.tooling.preview.Preview
import androidx.compose.ui.unit.dp
import androidx.compose.ui.unit.sp
```

```
@Composable
```

```
fun AlertCardUI(
    icon: String,
    title: String,
    description: String,
    date: String,
    alertType: String
) {
    val imageVector = when (icon) {
        "local_fire_department" -> Icons.Default.LocalFireDepartment
        "health_and_safety" -> Icons.Default.HealthAndSafety
        "traffic" -> Icons.Default.Traffic
        "weather_mix" -> Icons.Default.Campaign
        else -> Icons.Default.Campaign
    }

    Card(
        modifier = Modifier
            .fillMaxWidth()
            .padding(vertical = 4.dp, horizontal = 0.dp),
        colors = CardDefaults.cardColors(containerColor = Color.White),
        elevation = CardDefaults.cardElevation(defaultElevation = 1.dp)
    )
}
```


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```
    ) {
        Column(
            modifier = Modifier
                .padding(16.dp)
        ) {
            Row(verticalAlignment = androidx.compose.ui.Alignment.CenterVertically) {
                Icon(
                    imageVector = imageVector,
                    contentDescription = "Alert Icon",
                    tint = Color(0xFF1976D2),
                    modifier = Modifier.size(24.dp)
                )
                Spacer(modifier = Modifier.width(12.dp))
                Text(
                    text = title,
                    fontSize = 18.sp,
                    fontWeight = FontWeight.Medium,
                    color = Color(0xFF22223B),
                    maxLines = 1
                )
            }
            Divider(modifier = Modifier.padding(vertical = 10.dp), color =
                Color(0xFFEEEEEE), thickness = 1.dp)
            Text(
                text = description,
                fontSize = 15.sp,
                color = Color(0xFF505050),
                modifier = Modifier.padding(bottom = 8.dp)
            )
            Row {
                Text(
                    text = date,
                    fontSize = 12.sp,
                    color = Color(0xFF909090),
                    fontWeight = FontWeight.Normal
                )
                Spacer(modifier = Modifier.width(12.dp))
                Text(
                    text = alertType,
                    fontSize = 12.sp,
                    color = Color(0xFF1976D2),
                    fontWeight = FontWeight.SemiBold
                )
            }
        }
    }
```

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```
    }
}

data class Alert(
    val icon: String,
    val title: String,
    val description: String,
    val date: String,
    val alertType: String
)

@Composable
fun AlertsScreen() {
    val alerts = listOf(
        Alert("weather_mix", "Heavy Snowfall Warning", "Heavy snowfall expected in your area. Stay indoors and avoid travel if possible.", "2024-12-01", "Weather"),
        Alert("local_fire_department", "Wildfire Alert", "A wildfire has been reported near your location. Follow evacuation orders and stay updated.", "2024-11-28", "Fire"),
        Alert("health_and_safety", "Health Advisory", "An outbreak of flu has been reported in your community. Take necessary precautions and get vaccinated.", "2024-11-25", "Health"),
        Alert("traffic", "Traffic Accident Alert", "A major traffic accident has occurred on the highway near you. Expect delays and consider alternate routes.", "2024-11-20", "Traffic")
    )

    Column(
        modifier = Modifier
            .fillMaxSize()
            .background(Color(0xFFF6F7F9))
            .padding(vertical = 20.dp, horizontal = 16.dp)
    ) {
        LazyColumn(
            verticalArrangement = Arrangement.spacedBy(8.dp)
        ) {
            items(alerts) { alert ->
                AlertCardUI(
                    alert.icon,
                    alert.title,
                    alert.description,
                    alert.date,
                    alert.alertType
                )
            }
        }
    }
}
```

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```
    }  
  }  
}
```

```
@Preview(showBackground = true)  
@Composable  
fun AlertsScreenPreview() {  
    AlertsScreen()  
}
```

Dashboard.kt

```
package com.bytemap.a24172012068_assignment.screen
```

```
import androidx.compose.foundation.background  
import androidx.compose.foundation.clickable  
import androidx.compose.foundation.layout.Arrangement  
import androidx.compose.foundation.layout.Box  
import androidx.compose.foundation.layout.Column  
import androidx.compose.foundation.layout.Row  
import androidx.compose.foundation.layout.Spacer  
import androidx.compose.foundation.layout.fillMaxSize  
import androidx.compose.foundation.layout.fillMaxWidth  
import androidx.compose.foundation.layout.height  
import androidx.compose.foundation.layout.padding  
import androidx.compose.foundation.layout.size  
import androidx.compose.foundation.layout.width  
import androidx.compose.foundation.rememberScrollState  
import androidx.compose.foundation.shape.CircleShape  
import androidx.compose.foundation.shape.RoundedCornerShape  
import androidx.compose.foundation.verticalScroll  
import androidx.compose.material.icons.Icons  
import androidx.compose.material.icons.filled.LocationOn  
import androidx.compose.material.icons.filled.Person  
import androidx.compose.material.icons.filled.Place  
import androidx.compose.material.icons.filled.Warning  
import androidx.compose.material.icons.outlined.MyLocation  
import androidx.compose.material3.Card  
import androidx.compose.material3.CardDefaults  
import androidx.compose.material3.Icon  
import androidx.compose.material3.MaterialTheme  
import androidx.compose.material3.Surface  
import androidx.compose.material3.Text  
import androidx.compose.runtime.Composable  
import androidx.compose.ui.Alignment  
import androidx.compose.ui.Modifier  
import androidx.compose.ui.draw.clip  
import androidx.compose.ui.graphics.Brush
```

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```
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.graphics.vector.ImageVector
import androidx.compose.ui.platform.LocalContext
import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.text.style.TextAlign
import androidx.compose.ui.text.style.TextOverflow
import androidx.compose.ui.tooling.preview.Preview
import androidx.compose.ui.unit.dp
import androidx.compose.ui.unit.sp
import androidx.navigation.NavController

data class QuickAction(
    val title: String,
    val subtitle: String,
    val bgColor: Color,
    val icon: ImageVector
)

@Composable
fun Dashboard(navController: NavController) {
    val quickActions = listOf(
        QuickAction("Safety Tips", "Stay protected", Color(0xFF10B981),
Icons.Default.Person),
        QuickAction("E-FIR", "File report", Color(0xFF3B82F6),
Icons.Default.Warning),
        QuickAction("Services", "Emergency help", Color(0xFFFF59E0B),
Icons.Default.Place),
        QuickAction("Danger Zone", "High-risk areas", Color(0xFFEF4444),
Icons.Default.LocationOn)
    )

    Box(
        modifier = Modifier
            .fillMaxSize()
            .background(
                Brush.verticalGradient(
                    colors = listOf(
                        Color(0xFFF8FAFC),
                        Color(0xFFEFF6FF)
                    )
                )
            )
    ) {
        Column(
            modifier = Modifier
                .fillMaxSize()
        )
    }
}
```

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```
        .verticalScroll(rememberScrollState())
        .padding(20.dp)
    ) {

        SafetyScoreCard()

        Spacer(modifier = Modifier.height(16.dp))

        LocationCard()

        Spacer(modifier = Modifier.height(16.dp))

        EmergencyButton(
            onClick = { navController.navigate("emergency_sos") }
        )

        Spacer(modifier = Modifier.height(24.dp))

        Text(
            text = "Quick Actions",
            fontSize = 18.sp,
            fontWeight = FontWeight.SemiBold,
            color = Color(0xFF475569)
        )

        Spacer(modifier = Modifier.height(12.dp))

        Column(
            verticalArrangement = Arrangement.spacedBy(12.dp)
        ) {
            Row(
                modifier = Modifier.fillMaxWidth(),
                horizontalArrangement = Arrangement.spacedBy(12.dp)
            ) {
                QuickActionCard(
                    action = quickActions[0],
                    modifier = Modifier.weight(1f),
                    onClick = { navController.navigate("safety_tips") }
                )
                QuickActionCard(
                    action = quickActions[1],
                    modifier = Modifier.weight(1f),
                    onClick = { navController.navigate("efir") }
                )
            }
        }
    }
```

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```
        Row(
            modifier = Modifier.fillMaxWidth(),
            horizontalArrangement = Arrangement.spacedBy(12.dp)
        ) {
            QuickActionCard(
                action = quickActions[2],
                modifier = Modifier.weight(1f),
                onClick = { navController.navigate("services") }
            )
            QuickActionCard(
                action = quickActions[3],
                modifier = Modifier.weight(1f),
                onClick = { navController.navigate("danger_zone") }
            )
        }
    }

    Spacer(modifier = Modifier.height(20.dp))
}
}
```

```
@Composable
fun SafetyScoreCard() {
    Card(
        shape = RoundedCornerShape(20.dp),
        modifier = Modifier.fillMaxWidth(),
        colors = CardDefaults.cardColors(containerColor = Color.White),
        elevation = CardDefaults.cardElevation(defaultElevation = 0.dp)
    ) {
        Row(
            modifier = Modifier
                .padding(24.dp)
                .fillMaxWidth(),
            verticalAlignment = Alignment.CenterVertically
        ) {
            Box(
                modifier = Modifier
                    .size(80.dp)
                    .clip(CircleShape)
                    .background(
                        Brush.linearGradient(
                            colors = listOf(Color(0xFF10B981),
                                Color(0xFF059669))
                        )
                    )
            )
        }
    }
}
```

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```
        )
    ),
    contentAlignment = Alignment.Center
) {
    Column(
        horizontalAlignment = Alignment.CenterHorizontally
    ) {
        Text(
            text = "90",
            fontSize = 28.sp,
            fontWeight = FontWeight.Bold,
            color = Color.White
        )
        Text(
            text = "/100",
            fontSize = 11.sp,
            fontWeight = FontWeight.Medium,
            color = Color.White.copy(alpha = 0.9f)
        )
    }
}

Spacer(modifier = Modifier.width(20.dp))

Column {
    Text(
        text = "Safety Score",
        fontWeight = FontWeight.Bold,
        fontSize = 20.sp,
        color = Color(0xFF1E293B)
    )
    Spacer(modifier = Modifier.height(8.dp))
    Surface(
        shape = RoundedCornerShape(12.dp),
        color = Color(0xFFD1FAE5)
    ) {
        Text(
            modifier = Modifier.padding(horizontal = 12.dp,
vertical = 6.dp),
            text = "Safe",
            color = Color(0xFF059669),
            fontWeight = FontWeight.SemiBold,
            fontSize = 13.sp
        )
    }
    Spacer(modifier = Modifier.height(6.dp))
}
```

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```
        Text(
            text = "Low risk detected in your area",
            fontSize = 13.sp,
            color = Color(0xFF64748B)
        )
    }
}

@Composable
fun LocationCard() {
    val placeName = "Shanku's Water Park, SH41, Mevad"
    val coordinates = "23.474803, 72.391667"
    val accuracy = "±5m"

    Card(
        modifier = Modifier.fillMaxWidth(),
        shape = RoundedCornerShape(20.dp),
        colors = CardDefaults.cardColors(containerColor = Color.White),
        elevation = CardDefaults.cardElevation(defaultElevation = 0.dp)
    ) {
        Column(
            modifier = Modifier.padding(24.dp)
        ) {
            Row(
                verticalAlignment = Alignment.CenterVertically
            ) {
                Box(
                    modifier = Modifier
                        .size(44.dp)
                        .clip(CircleShape)
                        .background(Color(0xFFDCEEFB)),
                    contentAlignment = Alignment.Center
                ) {
                    Icon(
                        imageVector = Icons.Outlined.MyLocation,
                        contentDescription = "Location",
                        tint = Color(0xFF3B82F6),
                        modifier = Modifier.size(24.dp)
                    )
                }
            }

            Spacer(modifier = Modifier.width(16.dp))

            Column(modifier = Modifier.weight(1f)) {
```


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```
        Text(
            text = "Current Location",
            fontWeight = FontWeight.Bold,
            fontSize = 16.sp,
            color = Color(0xFF1E293B)
        )
        Spacer(modifier = Modifier.height(4.dp))
        Row(verticalAlignment = Alignment.CenterVertically) {
            Box(
                modifier = Modifier
                    .size(8.dp)
                    .clip(CircleShape)
                    .background(Color(0xFF10B981))
            )
            Spacer(modifier = Modifier.width(6.dp))
            Text(
                text = "Sharing active",
                fontSize = 13.sp,
                color = Color(0xFF10B981),
                fontWeight = FontWeight.Medium
            )
        }
    }
}
```

```
Spacer(modifier = Modifier.height(20.dp))
```

```
Text(
    text = placeName,
    fontWeight = FontWeight.SemiBold,
    fontSize = 15.sp,
    color = Color(0xFF334155),
    maxLines = 2,
    overflow = TextOverflow.Ellipsis,
    lineHeight = 20.sp
)
```

```
Spacer(modifier = Modifier.height(12.dp))
```

```
Row(
    modifier = Modifier.fillMaxWidth(),
    horizontalArrangement = Arrangement.SpaceBetween,
    verticalAlignment = Alignment.CenterVertically
) {
    Text(
        text = coordinates,
```

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```
        fontSize = 13.sp,
        color = Color(0xFF64748B),
        fontWeight = FontWeight.Medium
    )

    Surface(
        shape = RoundedCornerShape(8.dp),
        color = Color(0xFFD1FAE5)
    ) {
        Text(
            modifier = Modifier.padding(horizontal = 10.dp,
vertical = 4.dp),
            text = accuracy,
            fontSize = 12.sp,
            color = Color(0xFF059669),
            fontWeight = FontWeight.SemiBold
        )
    }
}
}
```

@Composable

```
fun EmergencyButton(onClick: () -> Unit = {}) {
    Card(
        modifier = Modifier
            .fillMaxWidth()
            .clickable(onClick = onClick),
        shape = RoundedCornerShape(20.dp),
        colors = CardDefaults.cardColors(
            containerColor = Color.Transparent
        ),
        elevation = CardDefaults.cardElevation(defaultElevation = 0.dp)
    ) {
        Box(
            modifier = Modifier
                .fillMaxWidth()
                .background(
                    Brush.horizontalGradient(
                        colors = listOf(Color(0xFFDC2626),
Color(0xFFEF4444))
                    )
                )
            .padding(vertical = 28.dp),
            contentAlignment = Alignment.Center
        )
    }
}
```

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```
    ) {
        Row(
            verticalAlignment = Alignment.CenterVertically,
            horizontalArrangement = Arrangement.Center
        ) {
            Box(
                modifier = Modifier
                    .size(48.dp)
                    .clip(CircleShape)
                    .background(Color.White.copy(alpha = 0.2f)),
                contentAlignment = Alignment.Center
            ) {
                Icon(
                    imageVector = Icons.Default.Warning,
                    contentDescription = "SOS",
                    tint = Color.White,
                    modifier = Modifier.size(28.dp)
                )
            }

            Spacer(modifier = Modifier.width(16.dp))

            Column {
                Text(
                    text = "EMERGENCY SOS",
                    color = Color.White,
                    fontSize = 20.sp,
                    fontWeight = FontWeight.Bold,
                    letterSpacing = 0.5.sp
                )
                Text(
                    text = "Tap to trigger alert",
                    color = Color.White.copy(alpha = 0.9f),
                    fontSize = 13.sp,
                    fontWeight = FontWeight.Medium
                )
            }
        }
    }
}

@Composable
fun QuickActionCard(
    action: QuickAction,
    modifier: Modifier = Modifier,
```

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```
onClick: () -> Unit = {}
) {
  Card(
    modifier = modifier
      .height(130.dp)
      .clickable(onClick = onClick),
    shape = RoundedCornerShape(20.dp),
    colors = CardDefaults.cardColors(containerColor = Color.White),
    elevation = CardDefaults.cardElevation(defaultElevation = 0.dp)
  ) {
    Box(
      modifier = Modifier.fillMaxSize()
    ) {
      Column(
        modifier = Modifier
          .fillMaxSize()
          .padding(16.dp),
        horizontalAlignment = Alignment.Start,
        verticalArrangement = Arrangement.SpaceBetween
      ) {
        Box(
          modifier = Modifier
            .size(48.dp)
            .clip(RoundedCornerShape(12.dp))
            .background(action.bgColor.copy(alpha = 0.1f)),
          contentAlignment = Alignment.Center
        ) {
          Icon(
            imageVector = action.icon,
            contentDescription = action.title,
            tint = action.bgColor,
            modifier = Modifier.size(24.dp)
          )
        }

        Column {
          Text(
            text = action.title,
            fontWeight = FontWeight.Bold,
            fontSize = 16.sp,
            color = Color(0xFF1E293B)
          )
          Spacer(modifier = Modifier.height(4.dp))
          Text(
            text = action.subtitle,
            fontSize = 12.sp,
```

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```
        color = Color(0xFF64748B),
        maxLines = 1,
        overflow = TextOverflow.Ellipsis
    )
    }
}
}
```

```
@Composable
@Preview(showBackground = true)
fun DashboardPreview() {
    Dashboard(navController)
    androidx.navigation.compose.rememberNavController()
}
```

DangerZoneScreen.kt

```
package com.bytemap.a24172012068_assignment.screen
```

```
import androidx.compose.foundation.background
import androidx.compose.foundation.layout.*
import androidx.compose.foundation.rememberScrollState
import androidx.compose.foundation.shape.RoundedCornerShape
import androidx.compose.foundation.verticalScroll
import androidx.compose.material.icons.Icons
import androidx.compose.material.icons.filled.*
import androidx.compose.material3.*
import androidx.compose.runtime.Composable
import androidx.compose.ui.Alignment
import androidx.compose.ui.Modifier
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.graphics.vector.ImageVector
import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.tooling.preview.Preview
import androidx.compose.ui.unit.dp
import androidx.compose.ui.unit.sp
import androidx.navigation.NavController
```

```
data class DangerZone(
    val name: String,
    val riskLevel: String,
    val description: String,
    val lastReported: String,
    val distance: String,
    val icon: ImageVector,
```

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```
        val color: Color
    )

@Composable
fun DangerZoneScreen(navController: NavController) {
    val dangerZones = listOf(
        DangerZone(
            "Downtown Market Area",
            "High Risk",
            "Multiple incidents reported in the last 24 hours",
            "2 hours ago",
            "1.2 km",
            Icons.Default.Warning,
            Color(0xFFE53E3E)
        ),
        DangerZone(
            "Industrial Zone",
            "Medium Risk",
            "Isolated area with limited lighting",
            "6 hours ago",
            "3.5 km",
            Icons.Default.Construction,
            Color(0xFFFF9800)
        ),
        DangerZone(
            "Parking Lot - Mall",
            "High Risk",
            "Recent theft incidents reported",
            "4 hours ago",
            "2.1 km",
            Icons.Default.LocalParking,
            Color(0xFFE53E3E)
        ),
        DangerZone(
            "Subway Station",
            "Low Risk",
            "Generally safe but stay alert",
            "1 day ago",
            "0.8 km",
            Icons.Default.Train,
            Color(0xFF4CAF50)
        ),
        DangerZone(
            "Night Club District",
            "Medium Risk",
            "Late night incidents common",
```

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```
        "8 hours ago",
        "4.2 km",
        Icons.Default.Nightlife,
        Color(0xFFFFF9800)
    )
)

Column(
    modifier = Modifier
        .fillMaxSize()
        .background(Color(0xFFF8F9FA))
        .verticalScroll(rememberScrollState())
        .padding(16.dp)
) {
    Card(
        modifier = Modifier.fillMaxWidth(),
        shape = RoundedCornerShape(16.dp),
        colors = CardDefaults.cardColors(containerColor =
Color.White),
        elevation = CardDefaults.cardElevation(defaultElevation =
2.dp)
    ) {
        Column(
            modifier = Modifier.padding(20.dp),
            horizontalAlignment = Alignment.CenterHorizontally
        ) {
            Icon(
                imageVector = Icons.Default.LocationOn,
                contentDescription = "Danger Zone Icon",
                tint = Color(0xFFE53E3E),
                modifier = Modifier.size(48.dp)
            )
            Spacer(modifier = Modifier.height(12.dp))
            Text(
                text = "Danger Zones",
                fontSize = 24.sp,
                fontWeight = FontWeight.Bold,
                color = Color(0xFF2C3E50)
            )
            Text(
                text = "Areas with reported safety incidents",
                fontSize = 14.sp,
                color = Color(0xFF7F8C8D),
                textAlign
androidx.compose.ui.text.style.TextAlign.Center
            )
        }
    }
}
```

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```
    }
  }

  Spacer(modifier = Modifier.height(20.dp))

  Card(
    modifier = Modifier.fillMaxWidth(),
    shape = RoundedCornerShape(12.dp),
    colors = CardDefaults.cardColors(containerColor =
Color.White),
    elevation = CardDefaults.cardElevation(defaultElevation =
2.dp)
  ) {
    Column(
      modifier = Modifier.padding(16.dp)
    ) {
      Text(
        text = "Risk Levels",
        fontSize = 16.sp,
        fontWeight = FontWeight.Bold,
        color = Color(0xFF2C3E50)
      )
      Spacer(modifier = Modifier.height(12.dp))

      Row(
        modifier = Modifier.fillMaxWidth(),
        horizontalArrangement = Arrangement.SpaceEvenly
      ) {
        RiskLevelIndicator("High", Color(0xFFE53E3E))
        RiskLevelIndicator("Medium", Color(0xFFFF9800))
        RiskLevelIndicator("Low", Color(0xFF4CAF50))
      }
    }
  }

  Spacer(modifier = Modifier.height(20.dp))

  Column(
    verticalArrangement = Arrangement.spacedBy(12.dp)
  ) {
    dangerZones.forEach { zone ->
      DangerZoneCard(zone = zone)
    }
  }

  Spacer(modifier = Modifier.height(20.dp))
```


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```
Card(
    modifier = Modifier.fillMaxWidth(),
    shape = RoundedCornerShape(16.dp),
    colors = CardDefaults.cardColors(containerColor =
Color(0xFFE3F2FD)),
    elevation = CardDefaults.cardElevation(defaultElevation =
2.dp)
) {
    Column(
        modifier = Modifier.padding(20.dp),
        horizontalAlignment = Alignment.CenterHorizontally
    ) {
        Icon(
            imageVector = Icons.Default.Security,
            contentDescription = "Safety Icon",
            tint = Color(0xFF2196F3),
            modifier = Modifier.size(32.dp)
        )
        Spacer(modifier = Modifier.height(8.dp))
        Text(
            text = "Stay Safe",
            color = Color(0xFF1976D2),
            fontSize = 18.sp,
            fontWeight = FontWeight.Bold
        )
        Text(
            text = "Avoid high-risk areas when possible. If you
must go, stay alert and share your location.",
            color = Color(0xFF1976D2),
            fontSize = 14.sp,
            textAlign
androidx.compose.ui.text.style.TextAlign.Center
        )
    }
}
```

```
@Composable
fun RiskLevelIndicator(level: String, color: Color) {
    Column(
        horizontalAlignment = Alignment.CenterHorizontally
    ) {
        Box(
            modifier = Modifier
```

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```
                .size(16.dp)
                .background(color, RoundedCornerShape(8.dp))
            )
        Spacer(modifier = Modifier.height(4.dp))
        Text(
            text = level,
            fontSize = 12.sp,
            color = Color(0xFF7F8C8D)
        )
    }
}

@Composable
fun DangerZoneCard(zone: DangerZone) {
    Card(
        modifier = Modifier.fillMaxWidth(),
        shape = RoundedCornerShape(12.dp),
        colors = CardDefaults.cardColors(containerColor = Color.White),
        elevation = CardDefaults.cardElevation(defaultElevation = 2.dp)
    ) {
        Column(
            modifier = Modifier.padding(16.dp)
        ) {
            Row(
                modifier = Modifier.fillMaxWidth(),
                horizontalArrangement = Arrangement.SpaceBetween,
                verticalAlignment = Alignment.CenterVertically
            ) {
                Row(
                    verticalAlignment = Alignment.CenterVertically
                ) {
                    Card(
                        shape = RoundedCornerShape(8.dp),
                        colors = CardDefaults.cardColors(containerColor =
zone.color.copy(alpha = 0.1f)),
                        modifier = Modifier.size(40.dp)
                    ) {
                        Box(
                            modifier = Modifier.fillMaxSize(),
                            contentAlignment = Alignment.Center
                        ) {
                            Icon(
                                imageVector = zone.icon,
                                contentDescription = "${zone.name} Icon",
                                tint = zone.color,
                                modifier = Modifier.size(20.dp)
                            )
                        }
                    }
                }
            }
        }
    }
}
```

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```
        )
    }
}

Spacer(modifier = Modifier.width(12.dp))

Column {
    Text(
        text = zone.name,
        fontSize = 16.sp,
        fontWeight = FontWeight.Bold,
        color = Color(0xFF2C3E50)
    )
    Text(
        text = zone.distance,
        fontSize = 12.sp,
        color = Color(0xFF7F8C8D)
    )
}

}

Card(
    shape = RoundedCornerShape(12.dp),
    colors = CardDefaults.cardColors(containerColor =
zone.color.copy(alpha = 0.1f))
) {
    Text(
        text = zone.riskLevel,
        fontSize = 12.sp,
        fontWeight = FontWeight.Bold,
        color = zone.color,
        modifier = Modifier.padding(horizontal = 8.dp,
vertical = 4.dp)
    )
}

}

Spacer(modifier = Modifier.height(8.dp))

Text(
    text = zone.description,
    fontSize = 14.sp,
    color = Color(0xFF7F8C8D)
)

Spacer(modifier = Modifier.height(8.dp))
```

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```
        Text(
            text = "Last reported: ${zone.lastReported}",
            fontSize = 12.sp,
            color = Color(0xFF95A5A6),
            fontStyle = androidx.compose.ui.text.font.FontStyle.Italic
        )
    }
}
```

```
@Preview(showBackground = true)
@Composable
fun DangerZoneScreenPreview() {
    DangerZoneScreen(navController
androidx.navigation.compose.rememberNavController())
}
```

EFirScreen.kt

```
package com.bytemap.a24172012068_assignment.screen
```

```
import android.app.DatePickerDialog
import android.app.TimePickerDialog
import android.icu.util.Calendar
import androidx.compose.foundation.background
import androidx.compose.foundation.clickable
import androidx.compose.foundation.layout.*
import androidx.compose.foundation.rememberScrollState
import androidx.compose.foundation.shape.RoundedCornerShape
import androidx.compose.foundation.verticalScroll
import androidx.compose.material.icons.Icons
import androidx.compose.material.icons.filled.*
import androidx.compose.material3.Button
import androidx.compose.material3.ButtonDefaults
import androidx.compose.material3.Checkbox
import androidx.compose.material3.DatePicker
import androidx.compose.material3.FilterChip
import androidx.compose.material3.Icon
import androidx.compose.material3.OutlinedTextField
import androidx.compose.material3.Text
import androidx.compose.runtime.Composable
import androidx.compose.runtime.mutableStateOf
import androidx.compose.runtime.remember
import androidx.compose.runtime.getValue
import androidx.compose.runtime.setValue
import androidx.compose.ui.Alignment
import androidx.compose.ui.Modifier
```

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```
import androidx.compose.ui.graphics.vector.ImageVector
import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.tooling.preview.Preview
import androidx.compose.ui.unit.dp
import androidx.compose.ui.unit.sp
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.platform.LocalContext
import androidx.compose.ui.text.font.FontStyle
import androidx.navigation.NavController

data class Incident(
    val name: String,
    val icon: ImageVector
)

@Composable
fun EFirScreen(navController: NavController){
    Box(
        modifier = Modifier
            .fillMaxSize()
            .background(Color(0xFFF8F9FA))
    ) {
        EFirUI()
    }
}

@Composable
fun EFirUI() {
    Column(
        modifier = Modifier
            .fillMaxSize()
            .verticalScroll(rememberScrollState())
            .padding(16.dp),
        verticalArrangement = Arrangement.spacedBy(16.dp)
    ) {
        IncidentType()
        IncidentDescription()
        DateTime()
        LocationInput()
        WitnessesInput()
        AdditionalDetails()
        SubmitButton()
    }
}
```

@Composable

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```
fun IncidentType() {
    val incidentTypes = listOf(
        Incident("Harassment", Icons.Default.Block),
        Incident("Theft", Icons.Default.Lock),
        Incident("Assault", Icons.Default.Dangerous),
        Incident("Fraud", Icons.Default.CreditCard),
        Incident("Emergency", Icons.Default.Emergency),
        Incident("Other", Icons.Default.Notes)
    )

    var selectedIncident by remember { mutableStateOf<String?>(null) }

    Text(
        text = "Incident Type",
        modifier = Modifier.padding(bottom = 8.dp),
        fontSize = 18.sp,
        color = Color.DarkGray,
        fontWeight = FontWeight.Medium
    )

    FlowRow(
        horizontalArrangement = Arrangement.spacedBy(8.dp),
        verticalArrangement = Arrangement.spacedBy(8.dp),
        modifier = Modifier.fillMaxWidth()
    ) {
        incidentTypes.forEach { incident ->
            FilterChip(
                selected = selectedIncident == incident.name,
                onClick = {
                    selectedIncident = if (selectedIncident ==
incident.name) null else incident.name
                },
                label = {
                    Row(
                        verticalAlignment = Alignment.CenterVertically
                    ) {
                        Icon(
                            imageVector = incident.icon,
                            contentDescription = "${incident.name} Icon",
                            modifier = Modifier.size(18.dp)
                        )
                        Spacer(modifier = Modifier.width(6.dp))
                        Text(text = incident.name)
                    }
                },
                leadingIcon = if (selectedIncident == incident.name) {
```

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```
        {
            Icon(
                imageVector = Icons.Default.Check,
                contentDescription = "Selected",
                modifier = Modifier.size(18.dp)
            )
        }
    } else null
)
}

Text(
    text = "Other incidents",
    fontStyle = FontStyle.Italic,
    color = Color.Gray,
    modifier = Modifier.padding(top = 8.dp)
)
}

@Composable
fun IncidentDescription() {
    var description by remember { mutableStateOf("") }
    Text(
        text = "Incident Description *",
        modifier = Modifier.padding(top = 16.dp, bottom = 8.dp),
        fontSize = 18.sp,
        color = Color.DarkGray,
        fontWeight = FontWeight.Medium
    )
    OutlinedTextField(
        value = description,
        onChange = {description = it},
        modifier = Modifier
            .fillMaxWidth()
            .height(150.dp),
        placeholder = { Text(text = "Describe what happened in detail...",
color = Color.Gray, fontSize = 14.sp) },
        maxLines = 6
    )
    Row(
        modifier = Modifier.fillMaxWidth(),
        horizontalArrangement = Arrangement.SpaceBetween,
        verticalAlignment = Alignment.CenterVertically
    ) {
        Text(
```

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```
        text = "Be as specific as possible",
        color = Color.Gray,
        fontSize = 12.sp
    )
    Text(
        text = "0/5000",
        color = Color.Gray,
        fontSize = 12.sp
    )
}

@Composable
fun DateTime() {
    val context = LocalContext.current
    var selectedDate by remember { mutableStateOf("") }
    val calendar = Calendar.getInstance()

    val datePickerDialog = DatePickerDialog(
        context,
        { _, year, month, dayOfMonth ->
            val timePickerDialog = TimePickerDialog(
                context,
                { _, hourOfDay, minute ->
                    selectedDate = "$dayOfMonth/${month + 1}/$year -
                    ${"%02d".format(hourOfDay)}:${"%02d".format(minute)}"
                },
                calendar.get(Calendar.HOUR_OF_DAY),
                calendar.get(Calendar.MINUTE),
                false
            )
            timePickerDialog.show()
        },
        calendar.get(Calendar.YEAR),
        calendar.get(Calendar.MONTH),
        calendar.get(Calendar.DAY_OF_MONTH)
    )

    OutlinedTextField(
        value = selectedDate,
        onValueChange = { },
        modifier = Modifier
            .fillMaxWidth()
            .padding(8.dp)
            .clickable { datePickerDialog.show() },
        label = {
```


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```
        Row(verticalAlignment = Alignment.CenterVertically) {
            Icon(
                imageVector = Icons.Default.DateRange,
                contentDescription = "Date Icon",
                tint = Color.Gray,
                modifier = Modifier.size(18.dp)
            )
            Spacer(modifier = Modifier.width(8.dp))
            Text(
                text = "Select Date & Time",
                color = Color.Gray,
                fontSize = 14.sp
            )
        }
    },
    placeholder = {
        Text(
            text = "Tap to pick date and time",
            color = Color.Gray,
            fontSize = 13.sp
        )
    },
    readOnly = true,
    enabled = true
)
}
```

```
@Composable
fun LocationInput(){
    Text(
        text = "Location",
        modifier = Modifier.padding(bottom = 8.dp),
        fontSize = 18.sp,
        color = Color.DarkGray,
        fontWeight = FontWeight.Medium
    )
    Row(
        verticalAlignment = Alignment.CenterVertically
    ) {
        Checkbox( checked = false, onCheckedChange = { } )
        Text(text = "Use current location", color = Color.Gray)
    }
    OutlinedTextField(
        value = "",
        onValueChange = { },
        leadingIcon = {
```

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```
        Icon(
            imageVector = Icons.Default.LocationOn,
            contentDescription = "Location Icon",
            tint = Color.Gray
        )
    },
    modifier = Modifier
        .fillMaxWidth()
        .padding(top = 8.dp),
    placeholder = { Text(text = "Enter location details...", color =
Color.Gray, fontSize = 14.sp) }
    )
}
```

```
@Composable
fun WitnessesInput(){
    var witnesses by remember { mutableStateOf("") }
    Text(
        text = "Witnesses (Optional)",
        modifier = Modifier.padding(top = 16.dp, bottom = 8.dp),
        fontSize = 18.sp,
        color = Color.DarkGray,
        fontWeight = FontWeight.Medium
    )
    Row {
        OutlinedTextField(
            value = witnesses,
            onChange = { witnesses = it },
            modifier = Modifier
                .weight(1f)
                .heightIn(min = 56.dp)
                .align(Alignment.CenterVertically),
            placeholder = { Text(text = "Enter witness details...",
                color = Color.Gray, fontSize = 14.sp) }
        )
        Button(
            onClick = { },
            shape = RoundedCornerShape(8.dp),
            modifier = Modifier
                .padding(start = 8.dp)
                .heightIn(min = 56.dp)
                .align(Alignment.CenterVertically)
        ) {
            Text(text = "+ Add", fontSize = 16.sp)
        }
    }
}
```

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```
    }
}

@Composable
fun AdditionalDetails() {
    var additional by remember { mutableStateOf("") }
    Text(
        text = "Additional Details (Optional)",
        modifier = Modifier.padding(top = 16.dp, bottom = 8.dp),
        fontSize = 18.sp,
        color = Color.DarkGray,
        fontWeight = FontWeight.Medium
    )
    OutlinedTextField(
        value = additional,
        onValueChange = {additional = it},
        modifier = Modifier
            .fillMaxWidth()
            .height(150.dp),
        placeholder = { Text(text = "Any additional information, evidence
, or notes...",
            color = Color.Gray, fontSize = 14.sp) },
        maxLines = 6
    )

    Row(
        modifier = Modifier.fillMaxWidth(),
        horizontalArrangement = Arrangement.End
    ) {
        Text(
            text = "0/2000",
            color = Color.Gray,
            fontSize = 12.sp
        )
    }
}

@Composable
fun SubmitButton() {
    Button(
        onClick = {},
        shape = RoundedCornerShape(8.dp),
        colors = ButtonDefaults.buttonColors(
            containerColor = Color(0xFFD32F2F),
            contentColor = Color.White
        )
    )
}
```

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```
        ),
        modifier = Modifier
            .fillMaxWidth()
            .padding(vertical = 20.dp)
            .height(50.dp)
    ) {
        Icon(
            imageVector = Icons.Default.InsertDriveFile,
            contentDescription = "Submit Icon",
            modifier = Modifier.size(20.dp)
        )
        Spacer(modifier = Modifier.width(8.dp))
        Text(text = "Submit Report", fontSize = 18.sp)
    }
}

@Preview(showBackground = true)
@Composable
fun EFirPreview() {
    EFirUI()
}
```

EmergencyContactsScreen.kt

```
package com.bytemap.a24172012068_assignment.screen
```

```
import androidx.compose.foundation.background
import androidx.compose.foundation.layout.*
import androidx.compose.foundation.rememberScrollState
import androidx.compose.foundation.shape.CircleShape
import androidx.compose.foundation.shape.RoundedCornerShape
import androidx.compose.foundation.verticalScroll
import androidx.compose.material.icons.Icons
import androidx.compose.material.icons.filled.Add
import androidx.compose.material.icons.filled.MoreVert
import androidx.compose.material3.*
import androidx.compose.runtime.Composable
import androidx.compose.ui.Alignment
import androidx.compose.ui.Modifier
import androidx.compose.ui.draw.clip
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.unit.dp
import androidx.compose.ui.unit.sp
import androidx.compose.ui.tooling.preview.Preview
import androidx.navigation.NavController
```

Smart Tourist Safety Monitoring & Incident Response

```
data class EmergencyContact(val name: String, val number: String, val label: String = "Parent")
```

```
@Composable
```

```
fun EmergencyContactsScreen(navController: NavController) {  
    val contacts = listOf(  
        EmergencyContact("PAPA", "8745214752"),  
        EmergencyContact("MOTHER", "7547862145")  
    )  
  
    Box(  
        modifier = Modifier  
            .fillMaxSize()  
            .background(Color(0xFFF5F7FA))  
    ) {  
        Column(  
            modifier = Modifier  
                .fillMaxSize()  
                .verticalScroll(rememberScrollState())  
                .padding(horizontal = 14.dp, vertical = 10.dp),  
            horizontalAlignment = Alignment.CenterHorizontally  
        ) {  
            contacts.forEach {  
                MiniContactCard(contact = it)  
                Spacer(Modifier.height(10.dp))  
            }  
        }  
        Box(  
            contentAlignment = Alignment.BottomEnd,  
            modifier = Modifier  
                .fillMaxSize()  
                .padding(18.dp)  
        ) {  
            FloatingActionButton(  
                shape = RoundedCornerShape(12.dp),  
                containerColor = Color(0xFF1937B3),  
                onClick = { },  
                modifier = Modifier.size(50.dp)  
            ) {  
                Icon(  
                    Icons.Default.Add,  
                    contentDescription = "Add Contact",  
                    tint = Color.White,  
                    modifier = Modifier.size(22.dp)  
                )  
            }  
        }  
    }  
}
```

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```
    }  
  }  
}  
  
@Composable  
fun MiniContactCard(contact: EmergencyContact) {  
    Card(  
        shape = RoundedCornerShape(16.dp),  
        colors = CardDefaults.cardColors(containerColor = Color.White),  
        modifier = Modifier  
            .fillMaxWidth()  
            .height(IntrinsicSize.Min),  
        elevation = CardDefaults.cardElevation(2.dp)  
    ) {  
        Row(  
            modifier = Modifier.padding(12.dp),  
            verticalAlignment = Alignment.CenterVertically  
        ) {  
            Box(  
                modifier = Modifier  
                    .size(38.dp)  
                    .clip(CircleShape)  
                    .background(Color(0xFF1937B3)),  
                contentAlignment = Alignment.Center  
            ) {  
                Text(  
                    text = contact.name.first().toString(),  
                    color = Color.White,  
                    fontWeight = FontWeight.SemiBold,  
                    fontSize = 16.sp  
                )  
            }  
            Spacer(Modifier.width(10.dp))  
            Column(  
                modifier = Modifier.weight(1f),  
                verticalArrangement = Arrangement.spacedBy(3.dp)  
            ) {  
                Text(  
                    contact.name,  
                    fontWeight = FontWeight.Medium,  
                    fontSize = 14.sp,  
                    color = Color(0xFF0B1432)  
                )  
                Text(  
                    contact.number,  
                    color = Color(0xFF6B7A99),  

```

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```
        fontSize = 13.sp,
        fontWeight = FontWeight.Normal
    )
    Box(
        modifier = Modifier
            .clip(RoundedCornerShape(7.dp))
            .background(Color(0xFFE8EAF6))
            .padding(horizontal = 8.dp, vertical = 3.dp)
    ) {
        Text(
            contact.label,
            color = Color(0xFF1937B3),
            fontSize = 11.sp,
            fontWeight = FontWeight.SemiBold
        )
    }
}
IconButton(
    onClick = { },
    modifier = Modifier.size(32.dp)
) {
    Icon(
        Icons.Default.MoreVert,
        contentDescription = "More options",
        tint = Color(0xFF9CA3AF),
        modifier = Modifier.size(16.dp)
    )
}
}
}
```

```
@Preview(showBackground = true)
@Composable
fun EmergencyContactsScreenPreview() {
    EmergencyContactsScreen(navController
androidx.navigation.compose.rememberNavController())
}
```

LocationHistoryScreen.kt

```
package com.bytemap.a24172012068_assignment.screen
```

```
import androidx.compose.foundation.layout.*
import androidx.compose.material3.*
import androidx.compose.runtime.Composable
import androidx.compose.ui.Alignment
import androidx.compose.ui.Modifier
```

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```
import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.tooling.preview.Preview
import androidx.compose.ui.unit.dp
import androidx.compose.ui.unit.sp
import androidx.navigation.NavController

@Composable
fun LocationHistoryScreen(navController: NavController) {
    Column(
        modifier = Modifier
            .fillMaxSize()
            .padding(16.dp),
        horizontalAlignment = Alignment.CenterHorizontally,
        verticalArrangement = Arrangement.Center
    ) {
        Text(
            text = "Location History",
            fontSize = 24.sp,
            fontWeight = FontWeight.Bold
        )

        Spacer(modifier = Modifier.height(16.dp))

        Text(
            text = "View your location history here",
            fontSize = 16.sp
        )
    }
}
```

```
@Preview(showBackground = true)
@Composable
fun LocationHistoryScreenPreview() {
    LocationHistoryScreen(navController
androidx.navigation.compose.rememberNavController())
}
```

LoginScreen.kt

```
package com.bytemap.a24172012068_assignment.screen
```

```
import androidx.compose.foundation.Image
import androidx.compose.foundation.background
import androidx.compose.foundation.layout.Box
import androidx.compose.foundation.layout.Column
import androidx.compose.foundation.layout.Row
import androidx.compose.foundation.layout.Spacer
import androidx.compose.foundation.layout.fillMaxSize
```


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```
import androidx.compose.foundation.layout.fillMaxWidth
import androidx.compose.foundation.layout.height
import androidx.compose.foundation.layout.padding
import androidx.compose.foundation.layout.size
import androidx.compose.foundation.layout.width
import androidx.compose.foundation.rememberScrollState
import androidx.compose.foundation.verticalScroll
import androidx.compose.material.icons.Icons
import androidx.compose.material.icons.filled.Person
import androidx.compose.material.icons.filled.VisibilityOff
import androidx.compose.material3.Button
import androidx.compose.material3.ButtonColors
import androidx.compose.material3.ButtonDefaults
import androidx.compose.material3.Checkbox
import androidx.compose.material3.Text
import com.bytemap.a24172012068_assignment.R
import androidx.compose.runtime.Composable
import androidx.compose.runtime.mutableStateOf
import androidx.compose.runtime.remember
import androidx.compose.runtime.getValue
import androidx.compose.runtime.setValue
import androidx.compose.ui.Alignment
import androidx.compose.ui.Modifier
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.res.painterResource
import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.tooling.preview.Preview
import androidx.compose.ui.unit.dp
import androidx.compose.ui.unit.sp
import com.bytemap.a24172012068_assignment.components.FormField
```

@Composable

```
fun LoginScreen() {
    var emailState by remember { mutableStateOf("") }
    var passwordState by remember { mutableStateOf("") }
    var isChecked by remember { mutableStateOf(false) }
    Column(
        horizontalAlignment = Alignment.CenterHorizontally,
        modifier = Modifier
            .fillMaxSize()
            .verticalScroll(rememberScrollState())
            .padding(20.dp)
    ) {
        Image(painter = painterResource(R.drawable.logo),
            contentDescription = "Login Image",
            modifier = Modifier
```

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```
        .align(
            alignment = Alignment.CenterHorizontally
        )
        .size(150.dp)
        .padding(0.dp, 50.dp, 0.dp, 10.dp))

Text(text = "Welcome Back", modifier = Modifier
    .align(
        alignment = Alignment.CenterHorizontally
    )
    .padding(0.dp, 20.dp, 0.dp, 10.dp),
    fontSize = 25.sp,
    fontWeight = FontWeight.Bold)
Spacer(modifier = Modifier.height(10.dp))
Text(text = "Sign in to access your account",
    modifier = Modifier.align(
        alignment = Alignment.CenterHorizontally),
    fontSize = 16.sp,
    )
Spacer(modifier = Modifier.height(30.dp))
FormField(
    label = "Email",
    textState = emailState,
    onTextChange = { emailState = it },
    icon = Icons.Default.Person
)
Spacer(modifier = Modifier.height(10.dp))
FormField(
    label = "Password",
    textState = passwordState,
    onTextChange = { passwordState = it },
    icon = Icons.Default.VisibilityOff,
    isPasswordField = true
)
Spacer(modifier = Modifier.height(10.dp))
Row(
    modifier = Modifier.fillMaxWidth(),
    verticalAlignment = Alignment.CenterVertically,
    horizontalArrangement
    androidx.compose.foundation.layout.Arrangement.SpaceBetween
)
{
    Row(verticalAlignment = Alignment.CenterVertically) {
        Checkbox(
            checked = isChecked,
            onCheckedChange = { isChecked = it }
        )
    }
}
```

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```
        )
        Text(
            text = "Remember Me",
            fontSize = 15.sp,
            modifier = Modifier.padding(start = 8.dp)
        )
    }

    Text(
        text = "Forgot Password?",
        fontSize = 15.sp
    )
}

Button( modifier = Modifier.width(250.dp)
        .height(90.dp)
        .padding(top = 30.dp),
        colors = ButtonDefaults.buttonColors(
            containerColor = Color(0xFF000000),
            contentColor = Color.White
        )
        , onClick = {
    }) {
    Text(text = "Login", fontSize = 20.sp)
}
Spacer(modifier = Modifier.height(20.dp))
Row (
    modifier = Modifier.align(Alignment.CenterHorizontally),
    verticalAlignment = Alignment.CenterVertically
){
    Text(
        text = "Don't have an account?",
        fontSize = 18.sp,
    )
    Spacer(modifier = Modifier.width(5.dp))
    Text(
        text = "Sign up",
        fontSize = 18.sp,
        color = Color.Red
    )
}
}
}

@Composable
@Preview(showBackground = true)
```

Smart Tourist Safety Monitoring & Incident Response

```
fun LoginScreenPreview() {  
    LoginScreen()  
}
```

MapScreen.kt

```
package com.bytemap.a24172012068_assignment.screen
```

```
import androidx.compose.foundation.layout.*  
import androidx.compose.foundation.shape.RoundedCornerShape  
import androidx.compose.material.icons.Icons  
import androidx.compose.material.icons.filled.MyLocation  
import androidx.compose.material.icons.filled.Search  
import androidx.compose.material3.*  
import androidx.compose.runtime.*  
import androidx.compose.ui.Alignment  
import androidx.compose.ui.Modifier  
import androidx.compose.ui.graphics.Color  
import androidx.compose.ui.platform.LocalInspectionMode  
import androidx.compose.ui.tooling.preview.Preview  
import androidx.compose.ui.unit.dp  
import com.bytemap.a24172012068_assignment.compose.SimpleMapView  
import org.osmdroid.util.GeoPoint
```

```
@Composable
```

```
fun MapScreen() {  
    var searchQuery by remember { mutableStateOf("") }  
  
    Box(modifier = Modifier.fillMaxSize()) {  
        SimpleMapView(  
            modifier = Modifier.fillMaxSize(),  
            initialLocation = GeoPoint(37.7749, -122.4194)  
        )  
  
        Card(  
            modifier = Modifier  
                .fillMaxWidth()  
                .padding(horizontal = 16.dp, vertical = 12.dp)  
                .align(Alignment.TopCenter),  
            shape = RoundedCornerShape(12.dp),  
            elevation = CardDefaults.cardElevation(defaultElevation =  
4.dp),  
            colors = CardDefaults.cardColors(containerColor =  
MaterialTheme.colorScheme.surface)  
        ) {  
            OutlinedTextField(  
                value = searchQuery,  
                onChange = { searchQuery = it },
```

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```
        modifier = Modifier
            .fillMaxWidth()
            .padding(8.dp),
        placeholder = { Text("Search location...") },
        leadingIcon = {
            Icon(
                imageVector = Icons.Default.Search,
                contentDescription = "Search",
                tint = MaterialTheme.colorScheme.primary
            )
        },
        singleLine = true,
        shape = RoundedCornerShape(8.dp),
        colors = OutlinedTextFieldDefaults.colors(
            focusedBorderColor = Color.Transparent,
            unfocusedBorderColor = Color.Transparent
        )
    )
}

FloatingActionButton(
    onClick = { },
    modifier = Modifier
        .align(Alignment.BottomEnd)
        .padding(16.dp),
    containerColor = MaterialTheme.colorScheme.primary,
    elevation =
FloatingActionButtonDefaults.elevation(defaultElevation = 6.dp)
) {
    Icon(
        imageVector = Icons.Default.MyLocation,
        contentDescription = "My Location",
        tint = Color.White
    )
}
}

@Preview(showBackground = true)
@Composable
fun MapScreenPreview() {
    MaterialTheme {
        MapScreen()
    }
}

}
NotificationsScreen.kt
```

Smart Tourist Safety Monitoring & Incident Response

```
package com.bytemap.a24172012068_assignment.screen
```

```
import androidx.compose.foundation.layout.*
import androidx.compose.material3.*
import androidx.compose.runtime.Composable
import androidx.compose.ui.Alignment
import androidx.compose.ui.Modifier
import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.tooling.preview.Preview
import androidx.compose.ui.unit.dp
import androidx.compose.ui.unit.sp
import androidx.navigation.NavController
```

```
@Composable
```

```
fun NotificationsScreen(navController: NavController) {
    Column(
        modifier = Modifier
            .fillMaxSize()
            .padding(16.dp),
        horizontalAlignment = Alignment.CenterHorizontally,
        verticalArrangement = Arrangement.Center
    ) {
        Text(
            text = "Notifications",
            fontSize = 24.sp,
            fontWeight = FontWeight.Bold
        )

        Spacer(modifier = Modifier.height(16.dp))

        Text(
            text = "No notifications yet",
            fontSize = 16.sp
        )
    }
}
```

```
@Preview(showBackground = true)
```

```
@Composable
```

```
fun NotificationsScreenPreview() {
    NotificationsScreen(navController
androidx.navigation.compose.rememberNavController())
}
```

OurTripScreen.kt

```
package com.bytemap.a24172012068_assignment.screen
```

Smart Tourist Safety Monitoring & Incident Response

```
import androidx.compose.foundation.background
import androidx.compose.foundation.layout.*
import androidx.compose.foundation.shape.RoundedCornerShape
import androidx.compose.material3.*
import androidx.compose.material.icons.Icons
import androidx.compose.material.icons.filled.LocationOn
import androidx.compose.material.icons.filled.Refresh
import androidx.compose.runtime.Composable
import androidx.compose.ui.Alignment
import androidx.compose.ui.Modifier
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.tooling.preview.Preview
import androidx.compose.ui.unit.dp
import androidx.compose.ui.unit.sp

@Composable
fun OurTripScreen() {
    Column(
        modifier = Modifier
            .fillMaxSize()
            .padding(16.dp)
    ) {
        Card(
            modifier = Modifier.fillMaxWidth(),
            shape = RoundedCornerShape(16.dp),
            elevation = CardDefaults.cardElevation(defaultElevation =
4.dp)
        ) {
            Column(modifier = Modifier.padding(16.dp)) {
                Row(verticalAlignment = Alignment.CenterVertically) {
                    Icon(
                        imageVector = Icons.Default.LocationOn,
                        contentDescription = "Location",
                        tint = Color(0xFF149EE7)
                    )
                    Spacer(Modifier.width(8.dp))
                    Text(
                        text = "Current Location",
                        style
MaterialTheme.typography.titleMedium.copy(fontWeight = FontWeight.Bold)
                    )
                }
                Spacer(Modifier.height(8.dp))
                Text("Address: Shanku's Water Park, SH41")
                Text("Coordinates: 23.474803, 72.391667")
            }
        }
    }
}
```

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```
        Text("Speed: 0.0 km/h")
        Text("Updates: 1 auto-updates completed")
    }
}

Spacer(Modifier.height(16.dp))

Card(
    modifier = Modifier.fillMaxWidth(),
    shape = RoundedCornerShape(16.dp),
    elevation = CardDefaults.cardElevation(defaultElevation =
4.dp)
) {
    Column(modifier = Modifier.padding(16.dp)) {
        Text(
            text = "Set Destination",
            style =
MaterialTheme.typography.titleMedium.copy(fontWeight = FontWeight.Bold)
        )
        Spacer(Modifier.height(8.dp))
        OutlinedTextField(
            value = "",
            onValueChange = {},
            label = { Text("Enter destination name") },
            modifier = Modifier.fillMaxWidth()
        )
        Spacer(Modifier.height(12.dp))
        Button(
            onClick = {},
            modifier = Modifier.fillMaxWidth()
        ) {
            Text("Search Destination")
        }
    }
}

Spacer(Modifier.height(16.dp))

Card(
    modifier = Modifier.fillMaxWidth(),
    shape = RoundedCornerShape(16.dp),
    elevation = CardDefaults.cardElevation(defaultElevation =
4.dp)
) {
    Column(modifier = Modifier.padding(16.dp)) {
        Text(
```


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```
                text = "Trip Status",
                style
MaterialTheme.typography.titleMedium.copy(fontWeight = FontWeight.Bold)
            )
            Spacer(Modifier.height(8.dp))
            Text("Monitoring Inactive")
            Spacer(Modifier.height(8.dp))
            Button(
                onClick = {},
                modifier = Modifier
                    .fillMaxWidth(),
                colors = ButtonDefaults.buttonColors(containerColor =
Color.White)
            ) {
                Text("Start Monitoring", color = Color(0xFF16C35B))
            }
        }
    }

    Spacer(Modifier.height(16.dp))

    OutlinedButton(
        onClick = {},
        modifier = Modifier.fillMaxWidth(),
        colors = ButtonDefaults.outlinedButtonColors(contentColor =
Color(0xFF149EE7))
    ) {
        Icon(Icons.Default.Refresh, contentDescription = "Refresh")
        Spacer(modifier = Modifier.width(8.dp))
        Text("Refresh Now")
    }
}
```

```
@Preview(showBackground = true)
@Composable
fun OurTripScreenPreview() {
    OurTripScreen()
}
```

ProfileScreen.kt

```
package com.bytemap.a24172012068_assignment.screen
```

```
import android.widget.Toast
import androidx.compose.foundation.BorderStroke
import androidx.compose.foundation.background
import androidx.compose.foundation.layout.Arrangement
```

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```
import androidx.compose.foundation.layout.Column
import androidx.compose.foundation.layout.Row
import androidx.compose.foundation.layout.Spacer
import androidx.compose.foundation.layout.fillMaxSize
import androidx.compose.foundation.layout.fillMaxWidth
import androidx.compose.foundation.layout.height
import androidx.compose.foundation.layout.padding
import androidx.compose.foundation.layout.size
import androidx.compose.foundation.layout.width
import androidx.compose.foundation.rememberScrollState
import androidx.compose.foundation.shape.CircleShape
import androidx.compose.foundation.shape.RoundedCornerShape
import androidx.compose.foundation.verticalScroll
import androidx.compose.material.icons.Icons
import androidx.compose.material.icons.automirrored.filled.Logout
import androidx.compose.material.icons.filled.CalendarToday
import androidx.compose.material.icons.filled.LocationOn
import androidx.compose.material.icons.filled.Mail
import androidx.compose.material.icons.filled.Person
import androidx.compose.material.icons.filled.Phone
import androidx.compose.material.icons.filled.Security
import androidx.compose.material.icons.filled.TrackChanges
import androidx.compose.material3.Card
import androidx.compose.material3.CardDefaults
import androidx.compose.material3.Icon
import androidx.compose.material3.OutlinedButton
import androidx.compose.material3.Text
import androidx.compose.runtime.Composable
import androidx.compose.ui.Alignment
import androidx.compose.ui.Modifier
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.platform.LocalContext
import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.tooling.preview.Preview
import androidx.compose.ui.unit.dp
import androidx.compose.ui.unit.sp
```

```
@Composable
fun ProfileScreen() {
    val context = LocalContext.current
    Column(
        modifier = Modifier
            .fillMaxSize()
            .background(Color(0xFFF8F9FA))
            .verticalScroll(rememberScrollState())
            .padding(8.dp)
```

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```
) {
    UserIDCard()
    ContactUI()
    LocationUI()

    Spacer(modifier = Modifier.height(18.dp))

    OutlinedButton(
        modifier = Modifier
            .fillMaxWidth()
            .background(Color.White),
        shape = RoundedCornerShape(12.dp),
        onClick = {
            Toast.makeText(context, "Logged Out",
Toast.LENGTH_SHORT).show()
        },
        border = BorderStroke(1.dp, Color.Red)
    ) {
        Icon(
            imageVector = Icons.AutoMirrored.Filled.Logout,
            contentDescription = "Logout Icon",
            tint = Color.Red,
            modifier = Modifier
                .size(28.dp)
                .padding(4.dp)
        )
        Text(
            text = "Logout",
            fontSize = 16.sp,
            color = Color.Red,
            modifier = Modifier.padding(8.dp)
        )
    }
}
}
```

```
@Composable
fun UserIDCard() {
    Card(
        modifier = Modifier
            .padding(8.dp)
            .fillMaxWidth(),
        colors = CardDefaults.cardColors(containerColor = Color.White),
        elevation = CardDefaults.cardElevation(defaultElevation = 4.dp)
    ) {
```

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```
Column(
    modifier = Modifier
        .padding(32.dp)
        .fillMaxWidth(),
    horizontalAlignment = Alignment.CenterHorizontally,
    verticalArrangement = Arrangement.Center
) {
    Card(
        modifier = Modifier
            .padding(8.dp)
            .align(alignment = Alignment.CenterHorizontally),
        colors = CardDefaults.cardColors(containerColor =
Color(0xFFE3F2FD)),
        shape = CircleShape,
        elevation = CardDefaults.cardElevation(defaultElevation =
2.dp)
    ) {
        Icon(
            imageVector = Icons.Default.Person,
            contentDescription = "User Icon",
            tint = Color(0xFF2196F3),
            modifier = Modifier
                .size(70.dp)
                .padding(16.dp),
        )
    }
    Spacer(modifier = Modifier.height(16.dp))
    Text(
        text = "USER 1",
        fontSize = 24.sp,
        fontWeight = FontWeight.Bold,
        color = Color.Black
    )
    Spacer(modifier = Modifier.height(8.dp))
    Card(
        shape = RoundedCornerShape(16.dp),
        colors = CardDefaults.cardColors(containerColor =
Color(0xFFFFF5F5))
    ) {
        Text(
            text = "ID: 46a08ef58a11b7f86bcb9a8d97c4ac95",
            fontSize = 14.sp,
            color = Color.Gray,
            modifier = Modifier.padding(8.dp)
        )
    }
}
```

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```
    }  
  }  
}  
  
@Composable  
fun ContactUI() {  
    val contactDetails = listOf(  
        Triple("Phone", "+91 9512518403", Icons.Default.Phone),  
        Triple("Email", "user1@gmail.com", Icons.Default.Mail),  
        Triple("Registered", "Today", Icons.Default.CalendarToday)  
    )  
  
    Card(  
        modifier = Modifier  
            .padding(8.dp)  
            .fillMaxWidth(),  
        colors = CardDefaults.cardColors(containerColor = Color.White),  
        elevation = CardDefaults.cardElevation(defaultElevation = 4.dp)  
    ) {  
        Column(  
            modifier = Modifier  
                .padding(16.dp)  
                .fillMaxWidth(),  
        ) {  
            Text(  
                text = "Contact Information",  
                fontSize = 16.sp,  
                fontWeight = FontWeight.SemiBold,  
            )  
  
            Spacer(modifier = Modifier.height(16.dp))  
  
            contactDetails.forEachIndexed { index, (label, value, icon) ->  
                Row(  
                    verticalAlignment = Alignment.CenterVertically  
                ) {  
                    Card(  
                        shape = RoundedCornerShape(8.dp),  
                        colors = CardDefaults.cardColors(containerColor =  
Color(0xFFF5F5F5))  
                    ) {  
                        Icon(  
                            imageVector = icon,  
                            contentDescription = "$label Icon",  
                            tint = Color.Gray,  

```

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```
                modifier = Modifier
                    .size(30.dp)
                    .padding(4.dp)
            )
        }

        Spacer(modifier = Modifier.width(16.dp))

        Column(
            modifier = Modifier.fillMaxWidth()
        ) {
            Text(
                text = label,
                fontSize = 14.sp,
                color = Color.Gray
            )
            Text(
                text = value,
                fontSize = 16.sp,
                color = Color.Black
            )
        }
    }
    Spacer(modifier = Modifier.height(12.dp))
}
}
}
}

@Composable
fun LocationUI() {
    val contactDetails = listOf(
        Triple("Location Service", "Disabled", Icons.Default.LocationOn),
        Triple("Permission", "Unknown", Icons.Default.Security),
        Triple("Tracking", "Inactive", Icons.Default.TrackChanges)
    )

    val statusColors = mapOf(
        "Disabled" to Color(0xFFD32F2F),
        "Unknown" to Color(0xFFFFBC02D),
        "Inactive" to Color(0xFF9E9E9E)
    )

    Card(
        modifier = Modifier
            .padding(8.dp)
```

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```
        .fillMaxWidth(),
        colors = CardDefaults.cardColors(containerColor = Color.White),
        elevation = CardDefaults.cardElevation(defaultElevation = 4.dp)
    ) {
        Column(
            modifier = Modifier
                .padding(16.dp)
                .fillMaxWidth()
        ) {
            Text(
                text = "Location Settings",
                fontSize = 18.sp,
                fontWeight = FontWeight.SemiBold,
                color = Color.Black
            )

            Spacer(modifier = Modifier.height(16.dp))

            contactDetails.forEach { (label, value, icon) ->
                Row(
                    verticalAlignment = Alignment.CenterVertically,
                    modifier = Modifier
                        .fillMaxWidth()
                        .padding(vertical = 8.dp)
                ) {
                    Card(
                        shape = RoundedCornerShape(8.dp),
                        colors = CardDefaults.cardColors(containerColor =
Color(0xFFF5F5F5))
                    ) {
                        Icon(
                            imageVector = icon,
                            contentDescription = "$label Icon",
                            tint = Color.Gray,
                            modifier = Modifier
                                .size(30.dp)
                                .padding(4.dp)
                        )
                    }

                    Spacer(modifier = Modifier.width(16.dp))

                    Column {
                        Text(
                            text = label,
                            fontSize = 14.sp,
```

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```
        color = Color.DarkGray
    )
    Text(
        text = value,
        fontSize = 16.sp,
        color = statusColors[value] ?: Color.Black
    )
}
}
}
}
}
}
```

```
@Preview(showBackground = true)
@Composable
fun ProfileScreenPreview() {
    ProfileScreen()
}
```

SafetyTipsScreen.kt

```
package com.bytemap.a24172012068_assignment.screen
```

```
import androidx.compose.foundation.background
import androidx.compose.foundation.layout.*
import androidx.compose.foundation.rememberScrollState
import androidx.compose.foundation.shape.RoundedCornerShape
import androidx.compose.foundation.verticalScroll
import androidx.compose.material.icons.Icons
import androidx.compose.material.icons.filled.*
import androidx.compose.material3.*
import androidx.compose.runtime.Composable
import androidx.compose.ui.Alignment
import androidx.compose.ui.Modifier
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.graphics.vector.ImageVector
import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.tooling.preview.Preview
import androidx.compose.ui.unit.dp
import androidx.compose.ui.unit.sp
import androidx.navigation.NavController
```

```
data class SafetyTip(
    val title: String,
    val description: String,
    val icon: ImageVector,
```


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```
        val color: Color
    )

@Composable
fun SafetyTipsScreen(navController: NavController) {
    val safetyTips = listOf(
        SafetyTip(
            "Stay Alert",
            "Always be aware of your surroundings and trust your instincts. If something feels wrong, it probably is.",
            Icons.Default.Visibility,
            Color(0xFF4CAF50)
        ),
        SafetyTip(
            "Share Location",
            "Keep your location sharing enabled and let trusted contacts know where you're going.",
            Icons.Default.LocationOn,
            Color(0xFF2196F3)
        ),
        SafetyTip(
            "Emergency Contacts",
            "Keep emergency contacts easily accessible and know how to reach them quickly.",
            Icons.Default.Contacts,
            Color(0xFFFF9800)
        ),
        SafetyTip(
            "Avoid Dark Areas",
            "Stick to well-lit, populated areas especially during night time. Plan your routes in advance.",
            Icons.Default.LightMode,
            Color(0xFF9C27B0)
        ),
        SafetyTip(
            "Trust Your Phone",
            "Keep your phone charged and easily accessible. Use emergency features when needed.",
            Icons.Default.Phone,
            Color(0xFFFF4433)
        ),
        SafetyTip(
            "Travel in Groups",
            "When possible, travel with friends or family. There's safety in numbers.",
            Icons.Default.Group,

```

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```
        Color(0xFF607D8B)
    )
)

Column(
    modifier = Modifier
        .fillMaxSize()
        .background(Color(0xFFF8F9FA))
        .verticalScroll(rememberScrollState())
        .padding(16.dp)
) {
    Card(
        modifier = Modifier.fillMaxWidth(),
        shape = RoundedCornerShape(16.dp),
        colors = CardDefaults.cardColors(containerColor =
Color.White),
        elevation = CardDefaults.cardElevation(defaultElevation =
2.dp)
    ) {
        Column(
            modifier = Modifier.padding(20.dp),
            horizontalAlignment = Alignment.CenterHorizontally
        ) {
            Icon(
                imageVector = Icons.Default.Security,
                contentDescription = "Safety Icon",
                tint = Color(0xFF4CAF50),
                modifier = Modifier.size(48.dp)
            )
            Spacer(modifier = Modifier.height(12.dp))
            Text(
                text = "Safety Tips",
                fontSize = 24.sp,
                fontWeight = FontWeight.Bold,
                color = Color(0xFF2C3E50)
            )
            Text(
                text = "Essential safety guidelines to keep you
protected",
                fontSize = 14.sp,
                color = Color(0xFF7F8C8D),
                textAlign =
androidx.compose.ui.text.style.TextAlign.Center
            )
        }
    }
}
```

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```
Spacer(modifier = Modifier.height(20.dp))

Column(
    verticalArrangement = Arrangement.spacedBy(12.dp)
) {
    safetyTips.forEach { tip ->
        SafetyTipCard(tip = tip)
    }
}

Spacer(modifier = Modifier.height(20.dp))

Card(
    modifier = Modifier.fillMaxWidth(),
    shape = RoundedCornerShape(16.dp),
    colors = CardDefaults.cardColors(containerColor =
Color(0xFFE53E3E)),
    elevation = CardDefaults.cardElevation(defaultElevation =
4.dp)
) {
    Column(
        modifier = Modifier
            .fillMaxWidth()
            .padding(20.dp),
        horizontalAlignment = Alignment.CenterHorizontally
    ) {
        Icon(
            imageVector = Icons.Default.Warning,
            contentDescription = "Emergency Icon",
            tint = Color.White,
            modifier = Modifier.size(32.dp)
        )
        Spacer(modifier = Modifier.height(8.dp))
        Text(
            text = "In Emergency?",
            color = Color.White,
            fontSize = 18.sp,
            fontWeight = FontWeight.Bold
        )
        Text(
            text = "Use the SOS button on the main screen",
            color = Color.White.copy(alpha = 0.9f),
            fontSize = 14.sp
        )
    }
}
```

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```
    }
  }
}

@Composable
fun SafetyTipCard(tip: SafetyTip) {
    Card(
        modifier = Modifier.fillMaxWidth(),
        shape = RoundedCornerShape(12.dp),
        colors = CardDefaults.cardColors(containerColor = Color.White),
        elevation = CardDefaults.cardElevation(defaultElevation = 2.dp)
    ) {
        Row(
            modifier = Modifier.padding(16.dp),
            verticalAlignment = Alignment.CenterVertically
        ) {
            Card(
                shape = RoundedCornerShape(8.dp),
                colors = CardDefaults.cardColors(containerColor =
tip.color.copy(alpha = 0.1f)),
                modifier = Modifier.size(48.dp)
            ) {
                Box(
                    modifier = Modifier.fillMaxSize(),
                    contentAlignment = Alignment.Center
                ) {
                    Icon(
                        imageVector = tip.icon,
                        contentDescription = "${tip.title} Icon",
                        tint = tip.color,
                        modifier = Modifier.size(24.dp)
                    )
                }
            }

            Spacer(modifier = Modifier.width(16.dp))

            Column(
                modifier = Modifier.weight(1f)
            ) {
                Text(
                    text = tip.title,
                    fontSize = 16.sp,
                    fontWeight = FontWeight.Bold,
                    color = Color(0xFF2C3E50)
                )
            }
        }
    }
}
```

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```
        Spacer(modifier = Modifier.height(4.dp))
        Text(
            text = tip.description,
            fontSize = 14.sp,
            color = Color(0xFF7F8C8D),
            lineHeight = 20.sp
        )
    }
}
}
```

```
@Preview(showBackground = true)
@Composable
fun SafetyTipsScreenPreview() {
    SafetyTipsScreen(navController
androidx.navigation.compose.rememberNavController())
}
```

SettingsScreen.kt

```
package com.bytemap.a24172012068_assignment.screen
```

```
import androidx.compose.foundation.background
import androidx.compose.foundation.layout.*
import androidx.compose.foundation.rememberScrollState
import androidx.compose.foundation.shape.RoundedCornerShape
import androidx.compose.foundation.verticalScroll
import androidx.compose.material.icons.Icons
import androidx.compose.material.icons.filled.*
import androidx.compose.material3.*
import androidx.compose.runtime.*
import androidx.compose.ui.Alignment
import androidx.compose.ui.Modifier
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.graphics.vector.ImageVector
import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.tooling.preview.Preview
import androidx.compose.ui.unit.dp
import androidx.compose.ui.unit.sp
import androidx.navigation.NavController
```

```
data class SettingsItem(
    val title: String,
    val subtitle: String,
    val icon: ImageVector,
    val iconColor: Color,
    val onClick: () -> Unit = {}
)
```

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```
)

@Composable
fun SettingsScreen(navController: NavController) {
    var locationEnabled by remember { mutableStateOf(true) }
    var notificationsEnabled by remember { mutableStateOf(true) }
    var autoSOSEnabled by remember { mutableStateOf(false) }
    var darkModeEnabled by remember { mutableStateOf(false) }
    var biometricEnabled by remember { mutableStateOf(true) }

    Column(
        modifier = Modifier
            .fillMaxSize()
            .background(Color(0xFFF5F7FA))
            .verticalScroll(rememberScrollState())
    ) {
        SettingsHeader()

        Spacer(modifier = Modifier.height(16.dp))

        SettingsSection(
            title = "Safety Settings",
            items = listOf(
                SettingsItem(
                    title = "Location Services",
                    subtitle = "Share your location for emergency
response",
                    icon = Icons.Default.LocationOn,
                    iconColor = Color(0xFF2196F3),
                    onClick = { locationEnabled = !locationEnabled }
                ),
                SettingsItem(
                    title = "Auto SOS",
                    subtitle = "Automatically send SOS in critical
situations",
                    icon = Icons.Default.Warning,
                    iconColor = Color(0xFFE53E3E),
                    onClick = { autoSOSEnabled = !autoSOSEnabled }
                ),
                SettingsItem(
                    title = "Biometric Lock",
                    subtitle = "Secure app with fingerprint or face
unlock",
                    icon = Icons.Default.Fingerprint,
                    iconColor = Color(0xFF4CAF50),
                    onClick = { biometricEnabled = !biometricEnabled }
                )
            )
        )
    }
}
```

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```
    )
  )
)

Spacer(modifier = Modifier.height(8.dp))

SettingsSection(
  title = "Notifications",
  items = listOf(
    SettingsItem(
      title = "Push Notifications",
      subtitle = "Receive alerts and safety updates",
      icon = Icons.Default.Notifications,
      iconColor = Color(0xFFFFF9800),
      onClick = { notificationsEnabled =
!notificationsEnabled }
    ),
    SettingsItem(
      title = "Emergency Alerts",
      subtitle = "Critical safety notifications",
      icon = Icons.Default.NotificationImportant,
      iconColor = Color(0xFFE53E3E),
      onClick = { }
    )
  )
)

Spacer(modifier = Modifier.height(8.dp))

SettingsSection(
  title = "Privacy & Security",
  items = listOf(
    SettingsItem(
      title = "Data Privacy",
      subtitle = "Manage your personal data",
      icon = Icons.Default.PrivacyTip,
      iconColor = Color(0xFF9C27B0),
      onClick = { }
    ),
    SettingsItem(
      title = "Account Security",
      subtitle = "Password and security settings",
      icon = Icons.Default.Security,
      iconColor = Color(0xFF607D8B),
      onClick = { }
    )
  )
)
```

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```
        )
    )

    Spacer(modifier = Modifier.height(8.dp))

    SettingsSection(
        title = "App Settings",
        items = listOf(
            SettingsItem(
                title = "Dark Mode",
                subtitle = "Switch between light and dark themes",
                icon = Icons.Default.DarkMode,
                iconColor = Color(0xFF424242),
                onClick = { darkModeEnabled = !darkModeEnabled }
            ),
            SettingsItem(
                title = "Language",
                subtitle = "English",
                icon = Icons.Default.Language,
                iconColor = Color(0xFF2196F3),
                onClick = { }
            ),
            SettingsItem(
                title = "About",
                subtitle = "App version and information",
                icon = Icons.Default.Info,
                iconColor = Color(0xFF757575),
                onClick = { }
            )
        )
    )

    Spacer(modifier = Modifier.height(16.dp))

    LogoutButton()

    Spacer(modifier = Modifier.height(32.dp))
}

@Composable
fun SettingsHeader() {
    Card(
        modifier = Modifier
            .fillMaxWidth()
            .padding(horizontal = 16.dp, vertical = 8.dp),
    )
}
```


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```
        shape = RoundedCornerShape(16.dp),
        colors = CardDefaults.cardColors(containerColor = Color.White),
        elevation = CardDefaults.cardElevation(defaultElevation = 2.dp)
    ) {
        Row(
            modifier = Modifier
                .fillMaxWidth()
                .padding(20.dp),
            verticalAlignment = Alignment.CenterVertically
        ) {
            Box(
                modifier = Modifier
                    .size(60.dp)
                    .background(
                        color = Color(0xFF1937B3),
                        shape = RoundedCornerShape(12.dp)
                    ),
                contentAlignment = Alignment.Center
            ) {
                Icon(
                    imageVector = Icons.Default.Settings,
                    contentDescription = "Settings",
                    tint = Color.White,
                    modifier = Modifier.size(28.dp)
                )
            }
            Spacer(modifier = Modifier.width(16.dp))

            Column {
                Text(
                    text = "Settings",
                    fontSize = 24.sp,
                    fontWeight = FontWeight.Bold,
                    color = Color(0xFF2C3E50)
                )
                Text(
                    text = "Customize your SafeHorizon experience",
                    fontSize = 14.sp,
                    color = Color(0xFF7F8C8D)
                )
            }
        }
    }
}
```

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```
@Composable
fun SettingsSection(
    title: String,
    items: List<SettingsItem>
) {
    Column(
        modifier = Modifier.padding(horizontal = 16.dp)
    ) {
        Text(
            text = title,
            fontSize = 16.sp,
            fontWeight = FontWeight.SemiBold,
            color = Color(0xFF2C3E50),
            modifier = Modifier.padding(horizontal = 4.dp, vertical =
8.dp)
        )

        Card(
            shape = RoundedCornerShape(16.dp),
            colors = CardDefaults.cardColors(containerColor =
Color.White),
            elevation = CardDefaults.cardElevation(defaultElevation =
2.dp)
        ) {
            Column {
                items.forEachIndexed { index, item ->
                    SettingsItemRow(
                        item = item,
                        showDivider = index < items.size - 1
                    )
                }
            }
        }
    }
}
```

```
@Composable
fun SettingsItemRow(
    item: SettingsItem,
    showDivider: Boolean
) {
    Column {
        Row(
            modifier = Modifier
                .fillMaxWidth()
                .padding(16.dp),
```

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```
        verticalAlignment = Alignment.CenterVertically
    ) {
        Box(
            modifier = Modifier
                .size(40.dp)
                .background(
                    color = item.iconColor.copy(alpha = 0.1f),
                    shape = RoundedCornerShape(8.dp)
                ),
            contentAlignment = Alignment.Center
        ) {
            Icon(
                imageVector = item.icon,
                contentDescription = item.title,
                tint = item.iconColor,
                modifier = Modifier.size(20.dp)
            )
        }

        Spacer(modifier = Modifier.width(16.dp))

        Column(
            modifier = Modifier.weight(1f)
        ) {
            Text(
                text = item.title,
                fontSize = 16.sp,
                fontWeight = FontWeight.Medium,
                color = Color(0xFF2C3E50)
            )
            Text(
                text = item.subtitle,
                fontSize = 13.sp,
                color = Color(0xFF7F8C8D)
            )
        }

        Icon(
            imageVector = Icons.Default.ChevronRight,
            contentDescription = "Navigate",
            tint = Color(0xFFBDC3C7),
            modifier = Modifier.size(20.dp)
        )
    }

    if (showDivider) {
```

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```
        HorizontalDivider(
            modifier = Modifier.padding(horizontal = 16.dp),
            color = Color(0xFFE5E7EB)
        )
    }
}

@Composable
fun LogoutButton() {
    Card(
        modifier = Modifier
            .fillMaxWidth()
            .padding(horizontal = 16.dp),
        shape = RoundedCornerShape(16.dp),
        colors = CardDefaults.cardColors(containerColor = Color.White),
        elevation = CardDefaults.cardElevation(defaultElevation = 2.dp)
    ) {
        Row(
            modifier = Modifier
                .fillMaxWidth()
                .padding(16.dp),
            verticalAlignment = Alignment.CenterVertically
        ) {
            Box(
                modifier = Modifier
                    .size(40.dp)
                    .background(
                        color = Color(0xFFE53E3E).copy(alpha = 0.1f),
                        shape = RoundedCornerShape(8.dp)
                    ),
                contentAlignment = Alignment.Center
            ) {
                Icon(
                    imageVector = Icons.Default.ExitToApp,
                    contentDescription = "Logout",
                    tint = Color(0xFFE53E3E),
                    modifier = Modifier.size(20.dp)
                )
            }

            Spacer(modifier = Modifier.width(16.dp))

            Column(
                modifier = Modifier.weight(1f)
            ) {
```

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```
        Text(
            text = "Logout",
            fontSize = 16.sp,
            fontWeight = FontWeight.Medium,
            color = Color(0xFFE53E3E)
        )
        Text(
            text = "Sign out of your account",
            fontSize = 13.sp,
            color = Color(0xFF7F8C8D)
        )
    }

    Icon(
        imageVector = Icons.Default.ChevronRight,
        contentDescription = "Navigate",
        tint = Color(0xFFBDC3C7),
        modifier = Modifier.size(20.dp)
    )
}
}
```

```
@Preview(showBackground = true)
@Composable
fun SettingsScreenPreview() {
    MaterialTheme {
        SettingsScreen(navController
androidx.navigation.compose.rememberNavController())
    }
}
```

TripMonitorScreen.kt

```
package com.bytemap.a24172012068_assignment.screen
```

```
import androidx.compose.foundation.background
import androidx.compose.foundation.layout.*
import androidx.compose.material3.*
import androidx.compose.material3.TabRowDefaults.tabIndicatorOffset
import androidx.compose.runtime.*
import androidx.compose.ui.Alignment
import androidx.compose.ui.Modifier
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.tooling.preview.Preview
import androidx.compose.ui.unit.dp
import androidx.compose.ui.unit.sp
```

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```
import androidx.navigation.NavController
import androidx.navigation.compose.rememberNavController

@OptIn(ExperimentalMaterial3Api::class)
@Composable
fun TripMonitorScreen(navController: NavController) {
    var selectedTabIndex by remember { mutableStateOf(0) }
    val tabs = listOf("Our Trip", "Activities")

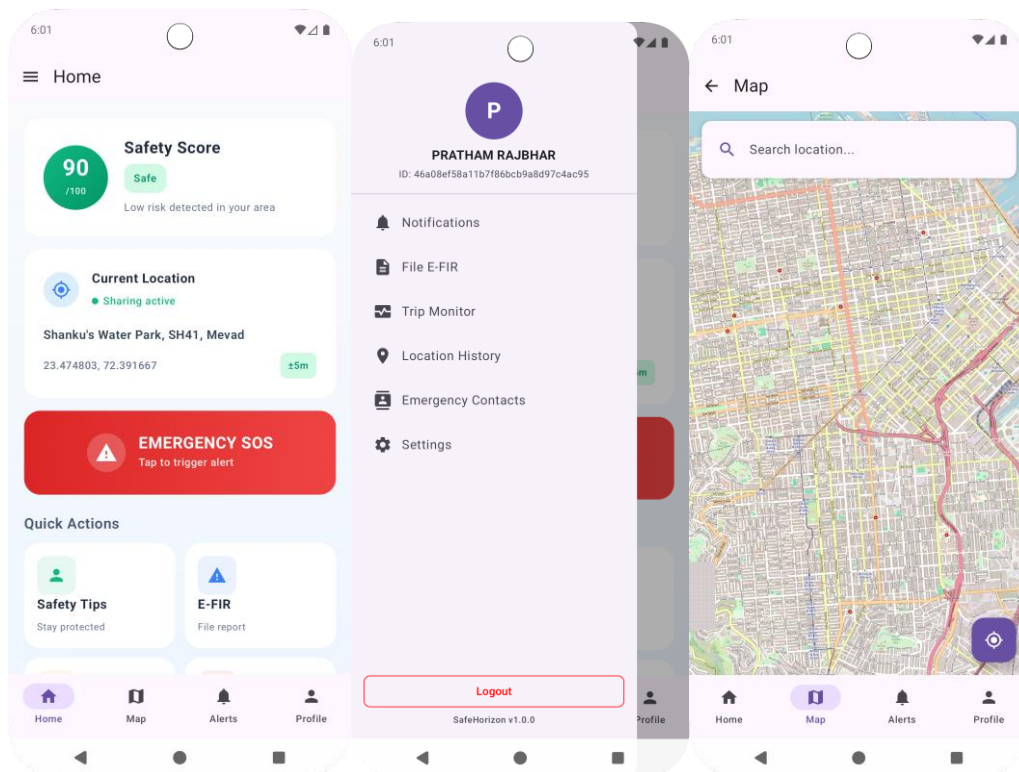
    Column(
        modifier = Modifier
            .fillMaxSize()
            .background(MaterialTheme.colorScheme.background)
    ) {
        TabRow(
            selectedTabIndex = selectedTabIndex,
            containerColor = MaterialTheme.colorScheme.surface,
            contentColor = MaterialTheme.colorScheme.primary,
            divider = { Divider(color = Color.LightGray, thickness = 1.dp) },
            indicator = { tabPositions ->
                TabRowDefaults.Indicator(
                    Modifier.tabIndicatorOffset(tabPositions[selectedTabIndex]),
                    color = MaterialTheme.colorScheme.primary
                )
            }
        ) {
            tabs.forEachIndexed { index, title ->
                Tab(
                    selected = selectedTabIndex == index,
                    onClick = { selectedTabIndex = index },
                    text = {
                        Text(
                            text = title,
                            fontWeight = if (selectedTabIndex == index)
                                FontWeight.Bold else FontWeight.Normal,
                            color = if (selectedTabIndex == index)
                                MaterialTheme.colorScheme.primary
                                else
                                    Color.Gray
                        )
                    }
                )
            }
        }
    }
}
```

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```
Box(
    modifier = Modifier
        .fillMaxSize()
        .padding(16.dp),
    contentAlignment = Alignment.Center
) {
    when (selectedTabIndex) {
        0 -> OurTripScreen()
        1 -> ActivitiesScreen()
    }
}
}
```

```
@Preview(showBackground = true)
@Composable
fun TripMonitorScreenPreview() {
    TripMonitorScreen(navController = rememberNavController())
}
```

Output :



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