# ============================================================================

# REACT NATIVE GROCERY DELIVERY APP - TYPESCRIPT STRUCTURE (.tsx)

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# After completing the initial setup, run these additional commands for TypeScript

# Step 1: Install TypeScript Dependencies

npm install --save-dev typescript @types/react @types/react-native

npm install --save-dev @typescript-eslint/eslint-plugin @typescript-eslint/parser

npm install --save-dev @types/react-redux @types/node

# Step 2: Install Additional Type Definitions

npm install --save-dev @types/react-navigation

npm install --save-dev @types/jest @types/react-test-renderer

# Step 3: Create TypeScript Configuration

cat > tsconfig.json << 'EOF'

{

"compilerOptions": {

"allowJs": true,

"allowSyntheticDefaultImports": true,

"esModuleInterop": true,

"isolatedModules": true,

"jsx": "react-native",

"lib": ["es2017"],

"moduleResolution": "node",

"noEmit": true,

"strict": true,

"target": "esnext",

"skipLibCheck": true,

"resolveJsonModule": true,

"baseUrl": "./src",

"paths": {

"@/\*": ["\*"],

"@components/\*": ["components/\*"],

"@screens/\*": ["screens/\*"],

"@services/\*": ["services/\*"],

"@utils/\*": ["utils/\*"],

"@config/\*": ["config/\*"],

"@assets/\*": ["assets/\*"],

"@store/\*": ["store/\*"],

"@hooks/\*": ["hooks/\*"],

"@types/\*": ["types/\*"]

}

},

"include": [

"src/\*\*/\*",

"App.tsx",

"index.js"

],

"exclude": [

"node\_modules",

"babel.config.js",

"metro.config.js",

"jest.config.js"

]

}

EOF

# Step 4: Create Type Definitions Directory and Files

mkdir -p src/types

touch src/types/{auth.ts,product.ts,cart.ts,order.ts,delivery.ts,payment.ts,admin.ts,navigation.ts,api.ts}

# Step 5: Remove old .js files and create new .tsx/.ts files

# Remove old JavaScript files

find src -name "\*.js" -type f -delete

# Create TypeScript component files

touch src/components/common/{Button.tsx,Input.tsx,Header.tsx,Loader.tsx,Modal.tsx,Card.tsx}

touch src/components/product/{ProductCard.tsx,ProductList.tsx,ProductFilter.tsx,ProductSearch.tsx}

touch src/components/cart/{CartItem.tsx,CartSummary.tsx,CouponInput.tsx}

touch src/components/delivery/{SlotPicker.tsx,SlotCalendar.tsx,TimeSlotGrid.tsx,DeliveryMap.tsx}

touch src/components/payment/{PaymentMethods.tsx,PaymentForm.tsx,PaymentStatus.tsx}

# Create TypeScript screen files

touch src/screens/auth/{LoginScreen.tsx,RegisterScreen.tsx,ForgotPasswordScreen.tsx,OTPVerificationScreen.tsx,ProfileScreen.tsx}

touch src/screens/home/{HomeScreen.tsx,CategoryScreen.tsx,ProductDetailsScreen.tsx,SearchScreen.tsx}

touch src/screens/cart/{CartScreen.tsx,CheckoutScreen.tsx,OrderConfirmationScreen.tsx}

touch src/screens/orders/{OrderHistoryScreen.tsx,OrderDetailsScreen.tsx,OrderTrackingScreen.tsx}

touch src/screens/delivery/{DeliverySlotScreen.tsx,AddressScreen.tsx,DeliveryInstructionsScreen.tsx}

touch src/screens/admin/{AdminDashboardScreen.tsx,ProductManagementScreen.tsx,OrderManagementScreen.tsx,InventoryScreen.tsx,SlotManagementScreen.tsx,CustomerManagementScreen.tsx,AnalyticsScreen.tsx}

# Create TypeScript navigation files

touch src/navigation/{AppNavigator.tsx,AuthNavigator.tsx,MainTabNavigator.tsx,AdminNavigator.tsx}

# Create TypeScript service files

touch src/services/api/{authService.ts,productService.ts,cartService.ts,orderService.ts,deliveryService.ts,paymentService.ts,adminService.ts,notificationService.ts,apiClient.ts}

touch src/services/payment/{stripeService.ts,razorpayService.ts,paypalService.ts,paymentGateway.ts}

touch src/services/storage/{asyncStorage.ts,secureStorage.ts,cacheService.ts}

touch src/services/location/{locationService.ts,geocoding.ts}

touch src/services/push/{pushNotificationService.ts,deepLinking.ts}

# Create TypeScript store files

touch src/store/{index.ts,store.ts}

touch src/store/slices/{authSlice.ts,productSlice.ts,cartSlice.ts,orderSlice.ts,deliverySlice.ts,userSlice.ts,adminSlice.ts}

touch src/store/middleware/{authMiddleware.ts,apiMiddleware.ts}

# Create TypeScript hook files

touch src/hooks/{useAuth.ts,useCart.ts,useLocation.ts,usePayment.ts,useDeliverySlots.ts,useNotifications.ts,useAdmin.ts}

# Create TypeScript utility files

touch src/utils/{constants.ts,helpers.ts,validators.ts,formatters.ts,dateUtils.ts,imageUtils.ts,errorHandler.ts}

# Create TypeScript config files

touch src/config/{index.ts,environment.ts,apiConfig.ts,paymentConfig.ts,pushConfig.ts}

# Rename App.js to App.tsx

mv App.js App.tsx

# Step 6: Update package.json with TypeScript scripts

cat > typescript\_scripts.json << 'EOF'

{

"scripts": {

"android": "react-native run-android",

"ios": "react-native run-ios",

"start": "react-native start",

"test": "jest",

"lint": "eslint . --ext .js,.jsx,.ts,.tsx",

"tsc": "tsc --noEmit",

"clean": "react-native clean",

"type-check": "tsc --noEmit",

"clean:android": "cd android && ./gradlew clean",

"clean:ios": "cd ios && rm -rf build && rm -rf Pods && pod install",

"build:android:debug": "cd android && ./gradlew assembleDebug",

"build:android:release": "cd android && ./gradlew assembleRelease",

"build:ios:debug": "npx react-native run-ios --configuration Debug",

"build:ios:release": "npx react-native run-ios --configuration Release",

"postinstall": "npx react-native-permissions ios && cd ios && pod install"

}

}

EOF

echo "============================================================================"

echo "TYPESCRIPT PROJECT STRUCTURE CREATED!"

echo "============================================================================"

echo ""

echo "Project Structure with TypeScript:"

echo ""

echo "grocery-delivery-app/"

echo "├── src/"

echo "│ ├── components/ # React components (.tsx)"

echo "│ │ ├── common/"

echo "│ │ │ ├── Button.tsx"

echo "│ │ │ ├── Input.tsx"

echo "│ │ │ ├── Header.tsx"

echo "│ │ │ ├── Loader.tsx"

echo "│ │ │ ├── Modal.tsx"

echo "│ │ │ └── Card.tsx"

echo "│ │ ├── product/"

echo "│ │ │ ├── ProductCard.tsx"

echo "│ │ │ ├── ProductList.tsx"

echo "│ │ │ ├── ProductFilter.tsx"

echo "│ │ │ └── ProductSearch.tsx"

echo "│ │ ├── cart/"

echo "│ │ │ ├── CartItem.tsx"

echo "│ │ │ ├── CartSummary.tsx"

echo "│ │ │ └── CouponInput.tsx"

echo "│ │ ├── delivery/"

echo "│ │ │ ├── SlotPicker.tsx"

echo "│ │ │ ├── SlotCalendar.tsx"

echo "│ │ │ ├── TimeSlotGrid.tsx"

echo "│ │ │ └── DeliveryMap.tsx"

echo "│ │ └── payment/"

echo "│ │ ├── PaymentMethods.tsx"

echo "│ │ ├── PaymentForm.tsx"

echo "│ │ └── PaymentStatus.tsx"

echo "│ │"

echo "│ ├── screens/ # App screens (.tsx)"

echo "│ │ ├── auth/"

echo "│ │ │ ├── LoginScreen.tsx"

echo "│ │ │ ├── RegisterScreen.tsx"

echo "│ │ │ ├── ForgotPasswordScreen.tsx"

echo "│ │ │ ├── OTPVerificationScreen.tsx"

echo "│ │ │ └── ProfileScreen.tsx"

echo "│ │ ├── home/"

echo "│ │ │ ├── HomeScreen.tsx"

echo "│ │ │ ├── CategoryScreen.tsx"

echo "│ │ │ ├── ProductDetailsScreen.tsx"

echo "│ │ │ └── SearchScreen.tsx"

echo "│ │ ├── cart/"

echo "│ │ │ ├── CartScreen.tsx"

echo "│ │ │ ├── CheckoutScreen.tsx"

echo "│ │ │ └── OrderConfirmationScreen.tsx"

echo "│ │ ├── orders/"

echo "│ │ │ ├── OrderHistoryScreen.tsx"

echo "│ │ │ ├── OrderDetailsScreen.tsx"

echo "│ │ │ └── OrderTrackingScreen.tsx"

echo "│ │ ├── delivery/"

echo "│ │ │ ├── DeliverySlotScreen.tsx"

echo "│ │ │ ├── AddressScreen.tsx"

echo "│ │ │ └── DeliveryInstructionsScreen.tsx"

echo "│ │ └── admin/"

echo "│ │ ├── AdminDashboardScreen.tsx"

echo "│ │ ├── ProductManagementScreen.tsx"

echo "│ │ ├── OrderManagementScreen.tsx"

echo "│ │ ├── InventoryScreen.tsx"

echo "│ │ ├── SlotManagementScreen.tsx"

echo "│ │ ├── CustomerManagementScreen.tsx"

echo "│ │ └── AnalyticsScreen.tsx"

echo "│ │"

echo "│ ├── navigation/ # Navigation (.tsx)"

echo "│ │ ├── AppNavigator.tsx"

echo "│ │ ├── AuthNavigator.tsx"

echo "│ │ ├── MainTabNavigator.tsx"

echo "│ │ └── AdminNavigator.tsx"

echo "│ │"

echo "│ ├── services/ # Services (.ts)"

echo "│ │ ├── api/"

echo "│ │ │ ├── authService.ts"

echo "│ │ │ ├── productService.ts"

echo "│ │ │ ├── cartService.ts"

echo "│ │ │ ├── orderService.ts"

echo "│ │ │ ├── deliveryService.ts"

echo "│ │ │ ├── paymentService.ts"

echo "│ │ │ ├── adminService.ts"

echo "│ │ │ ├── notificationService.ts"

echo "│ │ │ └── apiClient.ts"

echo "│ │ ├── payment/"

echo "│ │ │ ├── stripeService.ts"

echo "│ │ │ ├── razorpayService.ts"

echo "│ │ │ ├── paypalService.ts"

echo "│ │ │ └── paymentGateway.ts"

echo "│ │ ├── storage/"

echo "│ │ │ ├── asyncStorage.ts"

echo "│ │ │ ├── secureStorage.ts"

echo "│ │ │ └── cacheService.ts"

echo "│ │ ├── location/"

echo "│ │ │ ├── locationService.ts"

echo "│ │ │ └── geocoding.ts"

echo "│ │ └── push/"

echo "│ │ ├── pushNotificationService.ts"

echo "│ │ └── deepLinking.ts"

echo "│ │"

echo "│ ├── store/ # Redux store (.ts)"

echo "│ │ ├── index.ts"

echo "│ │ ├── store.ts"

echo "│ │ ├── slices/"

echo "│ │ │ ├── authSlice.ts"

echo "│ │ │ ├── productSlice.ts"

echo "│ │ │ ├── cartSlice.ts"

echo "│ │ │ ├── orderSlice.ts"

echo "│ │ │ ├── deliverySlice.ts"

echo "│ │ │ ├── userSlice.ts"

echo "│ │ │ └── adminSlice.ts"

echo "│ │ └── middleware/"

echo "│ │ ├── authMiddleware.ts"

echo "│ │ └── apiMiddleware.ts"

echo "│ │"

echo "│ ├── hooks/ # Custom hooks (.ts)"

echo "│ │ ├── useAuth.ts"

echo "│ │ ├── useCart.ts"

echo "│ │ ├── useLocation.ts"

echo "│ │ ├── usePayment.ts"

echo "│ │ ├── useDeliverySlots.ts"

echo "│ │ ├── useNotifications.ts"

echo "│ │ └── useAdmin.ts"

echo "│ │"

echo "│ ├── types/ # TypeScript definitions (.ts)"

echo "│ │ ├── auth.ts"

echo "│ │ ├── product.ts"

echo "│ │ ├── cart.ts"

echo "│ │ ├── order.ts"

echo "│ │ ├── delivery.ts"

echo "│ │ ├── payment.ts"

echo "│ │ ├── admin.ts"

echo "│ │ ├── navigation.ts"

echo "│ │ └── api.ts"

echo "│ │"

echo "│ ├── utils/ # Utilities (.ts)"

echo "│ │ ├── constants.ts"

echo "│ │ ├── helpers.ts"

echo "│ │ ├── validators.ts"

echo "│ │ ├── formatters.ts"

echo "│ │ ├── dateUtils.ts"

echo "│ │ ├── imageUtils.ts"

echo "│ │ └── errorHandler.ts"

echo "│ │"

echo "│ ├── config/ # Configuration (.ts)"

echo "│ │ ├── index.ts"

echo "│ │ ├── environment.ts"

echo "│ │ ├── apiConfig.ts"

echo "│ │ ├── paymentConfig.ts"

echo "│ │ └── pushConfig.ts"

echo "│ │"

echo "│ └── assets/ # Static assets"

echo "│ ├── images/"

echo "│ ├── icons/"

echo "│ ├── fonts/"

echo "│ └── animations/"

echo "│"

echo "├── android/ # Android specific files"

echo "├── ios/ # iOS specific files"

echo "├── \_\_tests\_\_/ # Test files (.test.ts/.test.tsx)"

echo "├── App.tsx # Main app component"

echo "├── index.js # Entry point"

echo "├── tsconfig.json # TypeScript configuration"

echo "├── package.json"

echo "└── README.md"

echo ""

echo "============================================================================"