

Mobile App Technical Specifications

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Platforms

- iOS
- Android

Operating Systems

- Android 6.0 and up
- iOS 16 or Later (For supported devices please go to <https://support.apple.com/en-us/103267>)

Technologies

- React Native 0.75.2
- React Native Paper 5.12.5
- React Native Navigation 6.x
- SQL Server
- Firebase
- ASP.Net core Web API

Servers

- Web Server to host the API. The API must be exposed to the public facing URL.
- Database Server to host the mobile data components.

API and Services

- Mobile Notification Service – A scheduled task.
- The service methods for the current API are documented using Swagger.

Third Party Software

- Firebase – Push Notifications
- Libraries
 - @react-navigation/bottom-tabs": "^6.5.8",

- "@react-navigation/drawer": "^6.6.3",
- "@react-navigation/native": "^6.1.7",
- "@react-navigation/stack": "^6.3.17",
- "axios": "^1.4.0",
- "i18next": "^23.4.4",
- "react": "18.3.1",
- "react-i18next": "^13.1.2",
- "react-native": "0.75.2",
- "react-native-bootsplash": "^5.0.2",
- "react-native-camera-kit": "^13.0.0",
- "react-native-crypto-js": "^1.0.0",
- "react-native-device-info": "^10.11.0",
- "react-native-dropdown-select-list": "^2.0.4",
- "react-native-exception-handler": "^2.10.10",
- "react-native-exit-app": "^2.0.0",
- "react-native-gesture-handler": "^2.12.1",
- "react-native-image-picker": "^7.1.0",
- "react-native-jailbreak": "^0.1.0",
- "react-native-mask-input": "^1.2.3",
- "react-native-pager-view": "^6.2.1",
- "react-native-paper": "^5.10.0",
- "react-native-permissions": "^3.9.0",
- "react-native-reanimated": "^3.4.2",
- "react-native-restart": "^0.0.27",
- "react-native-safe-area-context": "^4.7.1",
- "react-native-screens": "^3.24.0",
- "react-native-snap-carousel": "^3.9.1",
- "react-native-tab-view": "^3.5.2",
- "react-native-vector-icons": "^10.0.0",

- "react-native-video": "^6.0.0-alpha.8",
- "react-native-webview": "^13.6.0",
- "use-debounce": "^9.0.4",
- "zustand": "^4.4.1

Data Usage

- Data exchange format is JSON.
- Average usage per call for core features:
 - *Benefits* - 3.52 kb
 - *Scan UPC (validation)* - less than 10 bytes
 - *Messages* - 1.46 KB
- Design of new features places high priority on options that minimize transfer of data.

Security

- All requests that involve accessing user information require a registered device ID that is stored in the customers database. If the API is called without the authorization header that contains the registered device ID, the request is rejected with a 401-unauthorized user error.
- If the API is called by a device ID that exists in the database but does not match the registered account in the request, the request is rejected with a 401-unauthorized user error. This prevents accessing user information for an account that is not the registered account making the request.
- All database calls are managed using a SQL Server user account that has restricted access to mobile tables.
- The API does not return any confidential information to the mobile client that could be traced to a specific user.

Notifications

- The push notification provider sends push notifications to Apple (APNS) and Android. The push notification provider service handles all aspects of queued messages and the delivery of those messages to the targeted mobile application which runs on the device.
- The Notification Services process is scheduled to run at a specified time each business day to obtain data from the MIS database. The extracted data is submitted to push notification provider and then pushed upon receipt to registered devices.

Exceptions

- All exceptions are logged in Mobile_ExceptionLog table in the database.
- The generic exception message will display a reference number which can be used for troubleshooting.

Minnesota Department of Health - WIC Program, 625 Robert St N, PO BOX 64975, ST PAUL MN 55164-0975; 1-800-657-3942, health.wic@state.mn.us, www.health.state.mn.us; to obtain this information in a different format, call: 1-800-657-3942.

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