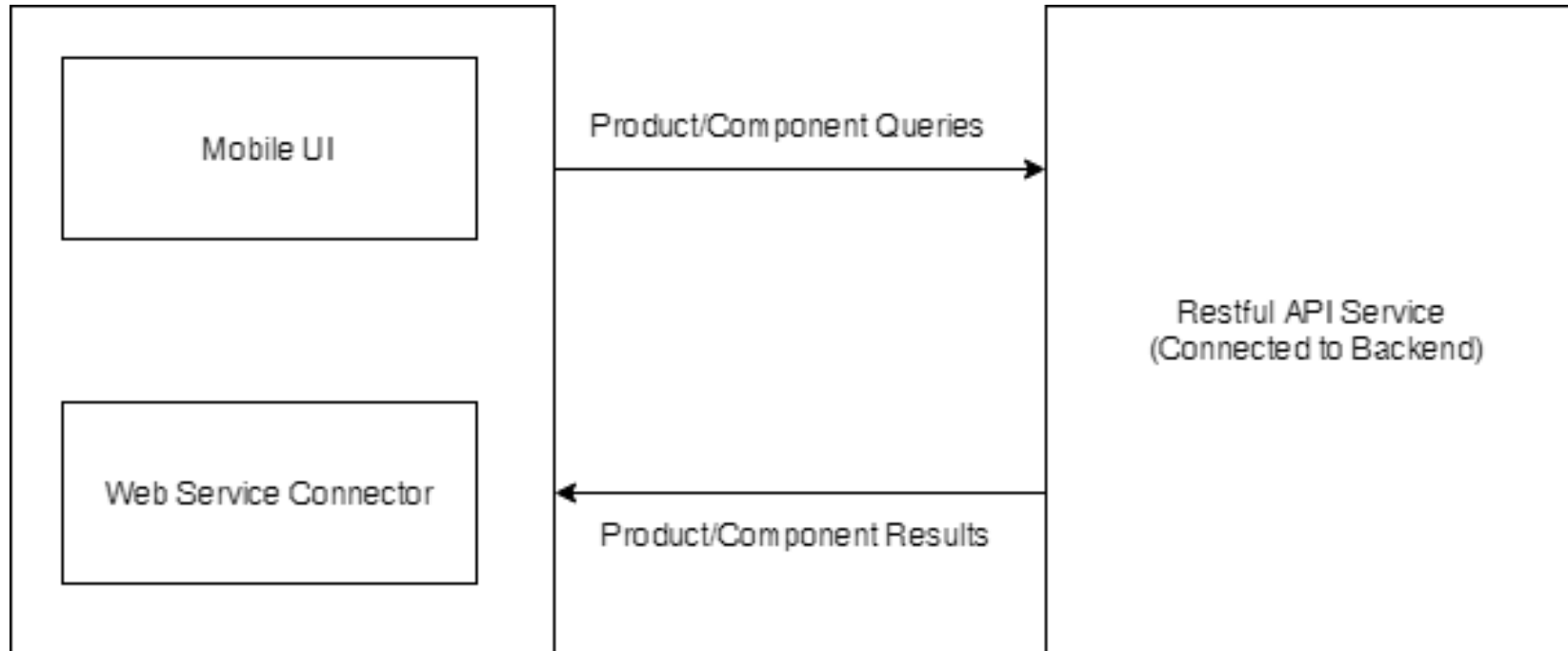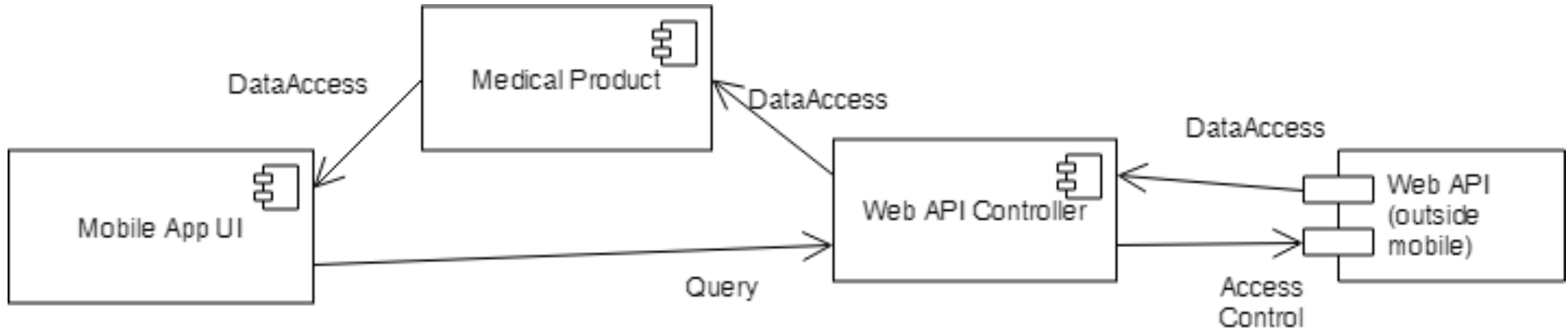# Mobile UI: Architecture Context Diagram
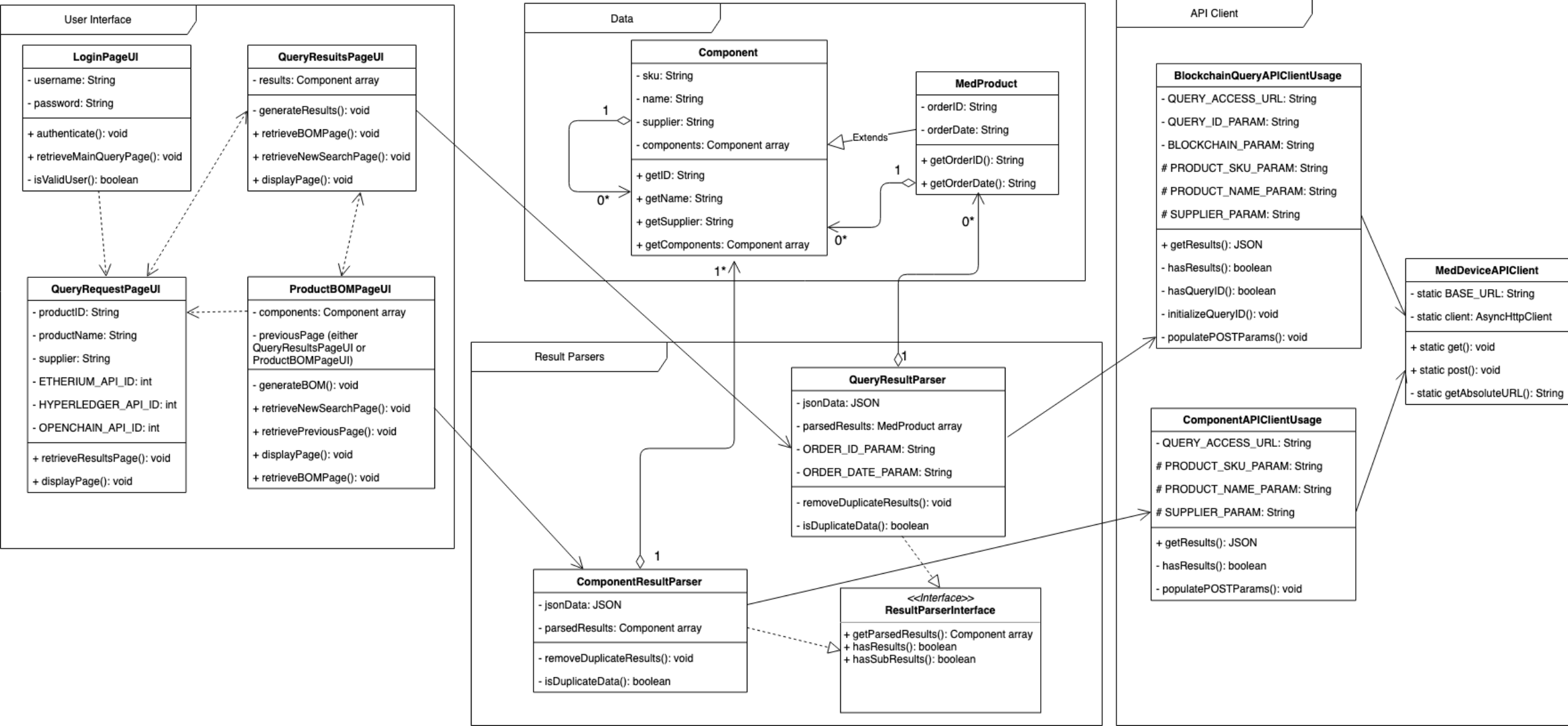
# Mobile UI: Architecture Layout

# Mobile UI: Component Diagram

# Mobile UI: Class Hierarchy & Relationship Diagram



**User Interface**

**LoginPageUI**
- username: String
- password: String
---
+ authenticate(): void
+ retrieveMainQueryPage(): void
- isValidUser(): boolean

**QueryResultsPageUI**
- results: Component array
---
- generateResults(): void
+ retrieveBOMPage(): void
+ retrieveNewSearchPage(): void
+ displayPage(): void

**QueryRequestPageUI**
- productID: String
- productName: String
- supplier: String
- ETHERIUM_API_ID: int
- HYPERLEDGER_API_ID: int
- OPENCHAIN_API_ID: int
---
+ retrieveResultsPage(): void
+ displayPage(): void

**ProductBOMPageUI**
- components: Component array
- previousPage (either QueryResultsPageUI or ProductBOMPageUI)
---
- generateBOM(): void
+ retrieveNewSearchPage(): void
+ retrievePreviousPage(): void
+ displayPage(): void
+ retrieveBOMPage(): void

**Data**

**Component**
- sku: String
- name: String
- supplier: String
- components: Component array
---
+ getID: String
+ getName: String
+ getSupplier: String
+ getComponents: Component array

**MedProduct**
- orderID: String
- orderDate: String
---
+ getOrderID: String
+ getOrderDate(): String

Extends

1

0*

1

0*

0*

1*

**Result Parsers**

**QueryResultParser**
- jsonData: JSON
- parsedResults: MedProduct array
- ORDER_ID_PARAM: String
- ORDER_DATE_PARAM: String
---
- removeDuplicateResults(): void
- isDuplicateData(): boolean

1

**ComponentResultParser**
- jsonData: JSON
- parsedResults: Component array
---
- removeDuplicateResults(): void
- isDuplicateData(): boolean

1

**<<Interface>>
ResultParserInterface**
---
+ getParsedResults(): Component array
+ hasResults(): boolean
+ hasSubResults(): boolean

**API Client**

**BlockchainQueryAPIClientUsage**
- QUERY_ACCESS_URL: String
- QUERY_ID_PARAM: String
- BLOCKCHAIN_PARAM: String
# PRODUCT_SKU_PARAM: String
# PRODUCT_NAME_PARAM: String
# SUPPLIER_PARAM: String
---
+ getResults(): JSON
- hasResults(): boolean
- hasQueryID(): boolean
- initializeQueryID(): void
- populatePOSTParams(): void

**ComponentAPIClientUsage**
- QUERY_ACCESS_URL: String
# PRODUCT_SKU_PARAM: String
# PRODUCT_NAME_PARAM: String
# SUPPLIER_PARAM: String
---
+ getResults(): JSON
- hasResults(): boolean
- populatePOSTParams(): void

**MedDeviceAPIClient**
- static BASE_URL: String
- static client: AsyncHttpClient
---
+ static get(): void
+ static post(): void
- static getAbsoluteURL(): String

# Mobile UI: Sequence Diagram