

1upHealth Coding Challenge

The 1upHealth API provides application developers access to patient electronic health records collected from approximately 400 health systems throughout the United States.

The 1upHealth FHIR \$everything query retrieves all electronic health record (EHR) information for a patient that has been authorized for use by 1upHealth. Results are returned as a paginated JSON-formatted FHIR “bundle” resource.

Your task is to design and implement a web application that uses the 1upHealth API to access test patient data using the FHIR \$everything query for a test user from an Electronic Health Record (EHR) vendor. The application should accept an access token and return the results of the \$everything query in a human-readable format. Note you don’t need to spend too much time on styling or visuals for the data, just make sure it’s human-readable.

While you may use the programming language and libraries of your choice to implement the solution, Node.js is preferred and encouraged. If you have extra time, optional extra credit may be granted for any of the following:

- Create a React.js web-based client application for the user interface
- Store the results of the \$everything query in your own SQL or noSQL database and retrieve the results of recent API calls on demand
- Deploy your solution to a publicly accessible web page

To submit, push your solution to a public GitHub (or Bitbucket or similar) repository and email a link and/or email a zip archive of your code to Al Seeley (al@1up.health). Include a README file in your submission that describes how to configure and run your solution. If your submission is a Node.js project with third-party dependencies, do not include your node_modules directory in your submission.

See next page for specific instructions for using the 1upHealth API as well as links to the necessary documentation.

Prerequisites

Before starting, follow the directions at <https://1up.health/dev/quick-start> to create a free account, create an application in the DevConsole, and save the Client ID and Client Secret for your application.

Note: You are NOT required to enter payment information to access demo data

Instructions

Steps	References
Using the User API OAuth flow, create a user and get an access token using your Client ID and Client Secret.	https://1up.health/dev/doc/user-management
Use the 1upHealth Connect API with your access token to connect to the <i>Epic (demo)</i> health system using this test user: <ul style="list-style-type: none">• Username: fhirjason• Password: epicepic1• System id for Epic: 4706	https://1up.health/dev/doc/quick-connect
Use the \$everything query against the FHIR API to retrieve all the EHR information for a patient	https://1up.health/dev/doc/fhir-everything-query https://1up.health/dev/doc/intro-fhir-api-oauth-query
Convert the JSON result of the API calls into a human-readable format and display.	

Note: You may find it useful to explore the 1up.health website for more supporting documentation.