

API Module and Web Hosting

- Our API Documentation will be hosted on **Swagger** - an open-source software framework backed by a large ecosystem of tools that helps developers design, build, document, and consume RESTful Web services.
- For Hosting our Web-App and API-App, we will be using **Azure** - an open, flexible, enterprise-grade cloud computing platform

Parameter passing and Results Collection

disease Disease Services

GET /disease/

Lets you fetch information in one of the following ways.
1. Name of the Disease - Returns information about given disease in the given location (if selected, otherwise all locations are included)
2. Location - Returns information for given location and disease (if selected, otherwise all diseases are shown).
3. Date From - Returns information for occurrences after the supplied date
4. Date To - Returns information for occurrences before the supplied date

Parameters Cancel

Name	Description
end_date string (query)	End date for filtering search in YYYY-MM-DD Eg: 2018-02-27 <input type="text" value="end_date - End date for filtering search in YY"/>
start_date string (query)	Start date for filtering search in YYYY-MM-DD Eg: 2018-01-01 <input type="text" value="start_date - Start date for filtering search in Y"/>
location string (query)	name of location where disease or outbreaks occurred <input type="text" value="location - name of location where disease or"/>
disease string (query)	name of the disease you want information about <input type="text" value="disease - name of the disease you want infor"/>

Execute

The date parameters help define a range of dates that the outbreak occurred in. They are not mandatory.

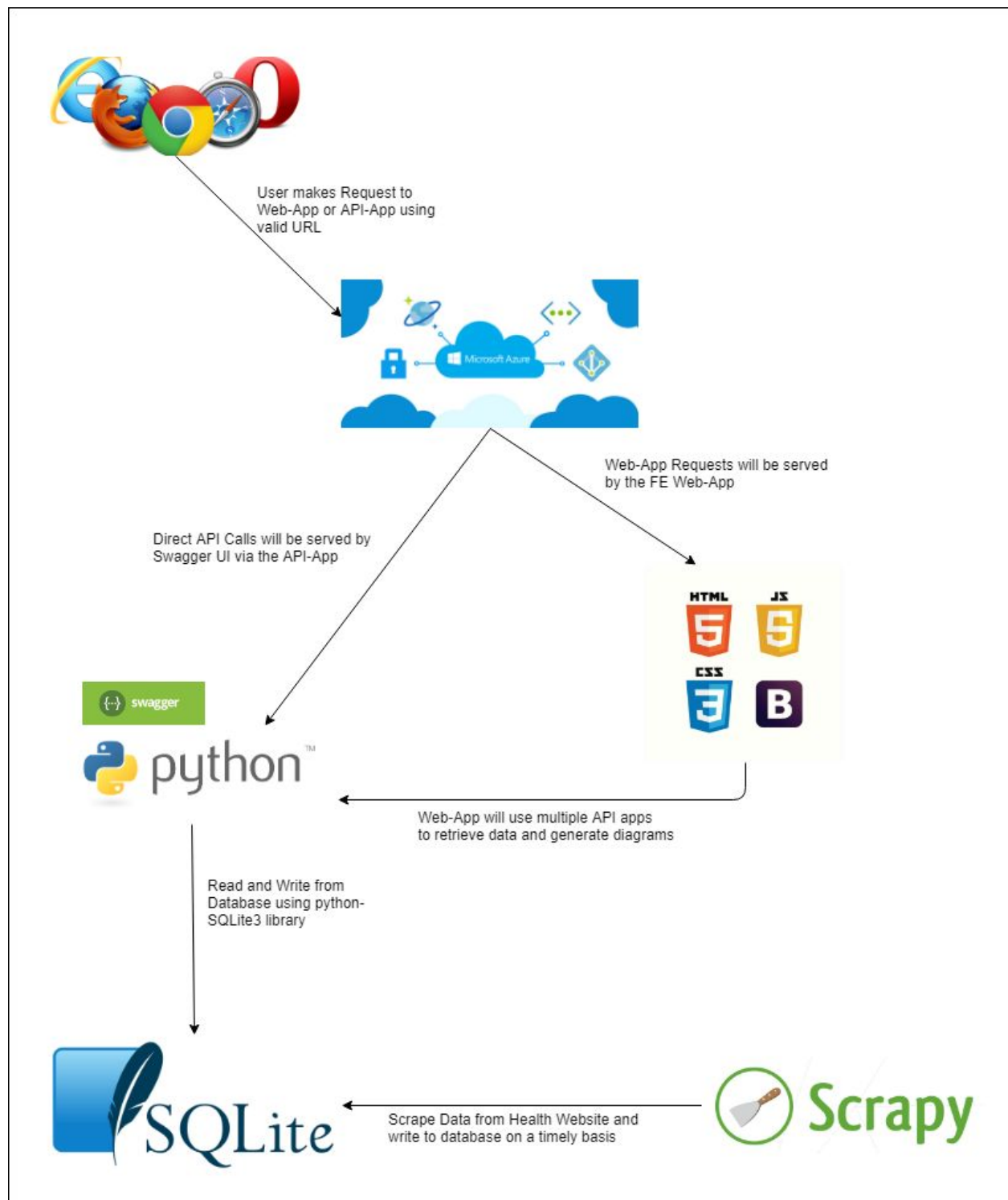
Users will be expected to provide at least one of location or disease name because articles need to be filtered by at least one of the sensible parameters.

Together, any combination of the given parameters will narrow the domain of search results.

Responses		Response content type
		application/json
Code	Description	
200	<div>Success</div> <div>Example Value Model</div> <pre>[{ "url": "string", "date_of_publication": "2019-03-31T10:17:51.465Z", "headline": "string", "main_text": "string", "reports": [{ "disease": "string", "syndrome": ["string"], "reported_events": [{ "type": "string", "date": "2019-03-31T10:17:51.465Z", "location": [{ "country": "string", "location": "string" }], "number_affected": 0 }], "comment": "string" }] }]</pre>	
400	Malformed Request	
404	Disease Not Found	

Response will be an array of articles.

Architecture and Technology Stack



For Backend, we have chosen Python because all the group members have significant experience using it to create webapps. SQLite3 and Python integrate quite nicely with python

libraries such as SQLAlchemy which makes it easy to code database operations and we believe this will enhance the functionality and behaviour of our API Code.

For Frontend, we have chosen HTML and CSS with JavaScript and Bootstrap because of simplicity, familiarity and to avoid roadblocks of learning a new language whilst developing an important product.

We were going to use Azure for deploying the API App as we attempted to use Heroku and Google Cloud Platform, however, we were discovered challenges that we were easily able to overcome using Azure.