

Backend

The Flask server has three main responsibilities:

- Hosting the frontend's static files
 - The Flask server serves the build files generated by React
 - Allows deployment of an application where the frontend and the internal API are hosted on the same server.
- Hosting the internal API
 - The internal API is an API exposed by the Flask backend. It serves as an interface between the React frontend and the backend's Python services.
 - It manage various HTTP routes:
 - Route to predict NMR data from a SMILES :
`/api/predict`
 - Route to convert a SMILES into a kekulized format :
`/api/convertToKekuleSmiles`
 - Route to detect the NMR peaks and multiplicities :
`/api/detectSpectrumRegions`
 - Route to load a JCAMPDX file :
`/api/loadJCAMP`
 - Route to obtain the molecule image with IDs :
`/api/getMolImageWithIds`
 - Route for the internal prediction model :
`/api/simpleModelPrediction`