



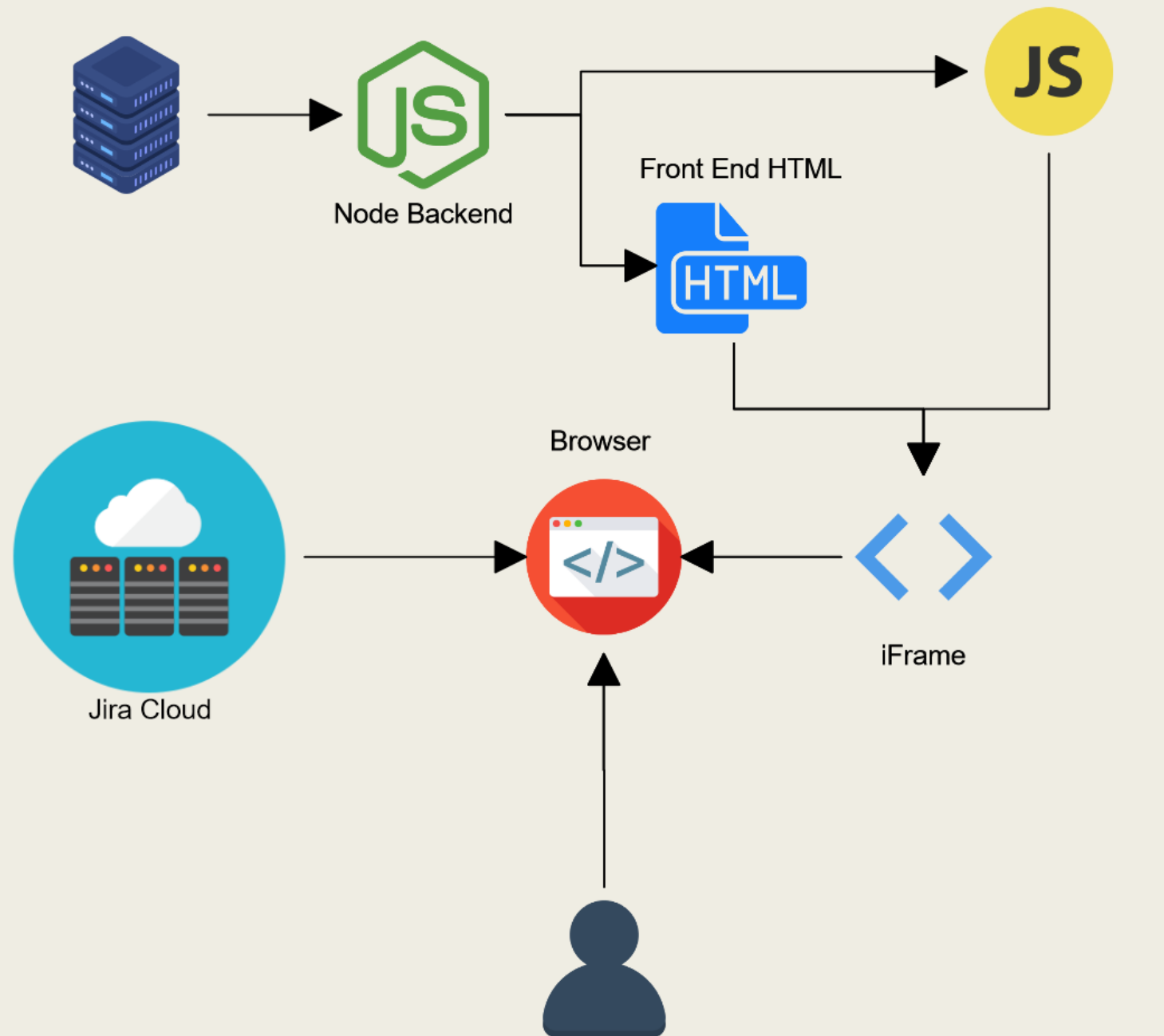
JIRA CLOUD

Development Loop



Architecture

- The entry point for our application is an iframe.
- We need to generate content to provide it to the iFrame
- Jira cloud would render our application
- Do I have to stick to Node Backend?
- Why Node (Javascript)?



Requirements

- Atlassian account
- Jira Cloud instance (<https://www.atlassian.com/try/cloud/signup>)
- Node.js and npm installation (<https://nodejs.org/en/>)
- Optional - NVM node version manager

ACE

- Boilerplate Generator: atlas-connect CLI tool
(<https://www.npmjs.com/package/atlas-connect>)

```
npm i -g atlas-connect
```

- Atlassian Connect Express is a toolkit developed by Atlassian
(<https://www.npmjs.com/package/atlassian-connect-express>)

Connect App Descriptor

- *<root>/atlassian-connect.json*
- In the server world it is the *atlassian-plugin.xml*
- Metadata. The file describes the application: name, version, its entry points, structure, access levels etc.

credentials.json

- As soon as this file is available in the root directory the application will try to install the application automatically.
- Should the credentials.json be not there the application will attempt to retrieve necessary data from config.json. No auto install will be triggered. You would have to install the application manually.

```
{  
  "hosts": {  
    "https://my-cloud-instance.atlassian.net": {  
      "product": "jira",  
      "username": "my.fancy@email.com",  
      "password": "token"  
    }  
  }  
}
```

- Generate access token for the application: <https://id.atlassian.com/manage-profile/security/api-tokens>

Back End – Front End

- Back End – express + ace middleware
- Front End – either static contents (HTML) or serving JS applications (vanilla, react, view etc.)
- Express takes care of handling rest entry points of your application
- ACE provides the middleware (e.g. authentication)

Jira Expressions?

- It's domain specific language, which can be used to evaluate custom code (expressions) in the context of Jira entities. (issues, users etc.)

<https://developer.atlassian.com/cloud/jira/platform/jira-expressions/>

- Example. An expression to retrieve the reporters display name of a given issue would be:

issue.reporter.displayName

- Expressions are "POST"ed to the respective entry point and cloud instance responds with a result. By providing the relevant query parameters one gets also the information about the complexity of a response. Multiple expressions can be evaluated in one request.

Code to download

- <https://github.com/ayessipovskiy/ace-fullstack>