

Project Pythia Content Creation - An Intake Cookbook



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BACKGROUND



Project Pythia develops educational resources that teach scientific and cloud computing to the geoscience community. Recently, the Project Pythia community has been developing “cookbooks” that show domain specific workflows, that solve problems encountered in geoscience. These cookbooks are in the form of Jupyter Books.

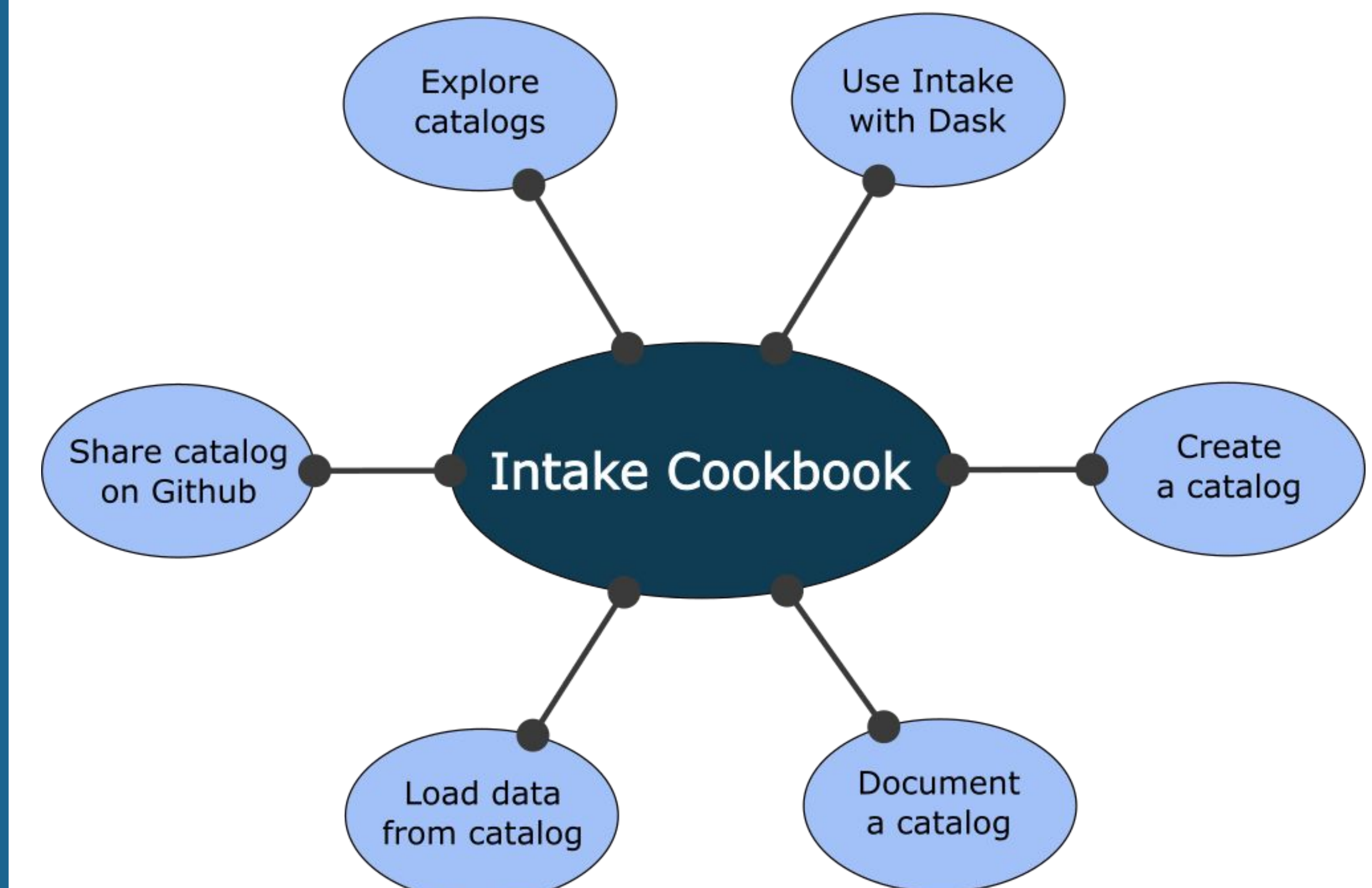
METHODS

Creating a Cookbook

The process of creating a cookbook is straightforward and well documented in the ProjectPythiaCookbooks contributor’s guide on Github. A summary of the process is as follows:

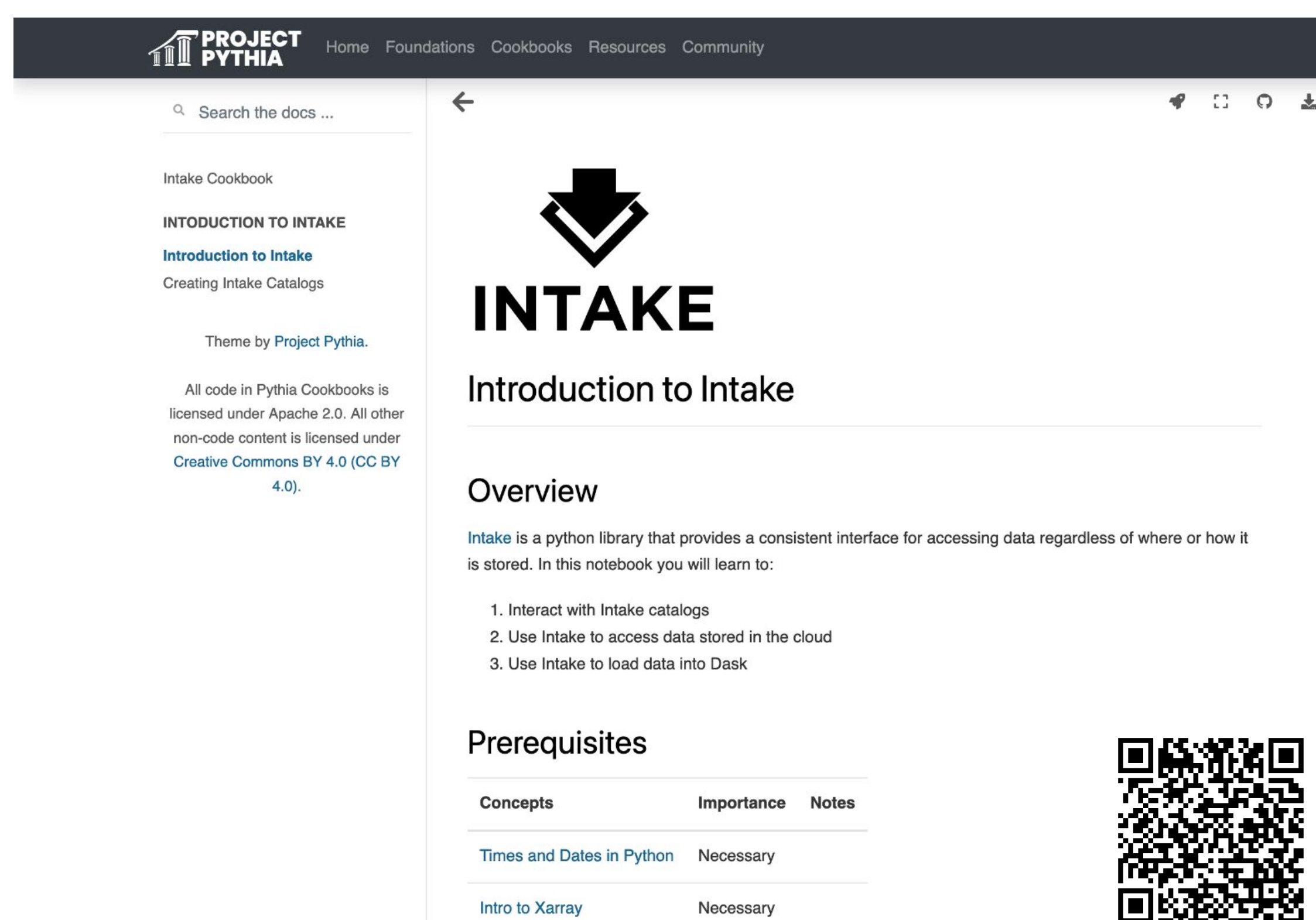
1. Use the cookbook-template on Github
2. Update the readme and config file
3. Add Jupyter Notebooks as content
4. Transfer your repository to Project Pythia

TOPICS



Topic Graph of Intake Cookbook

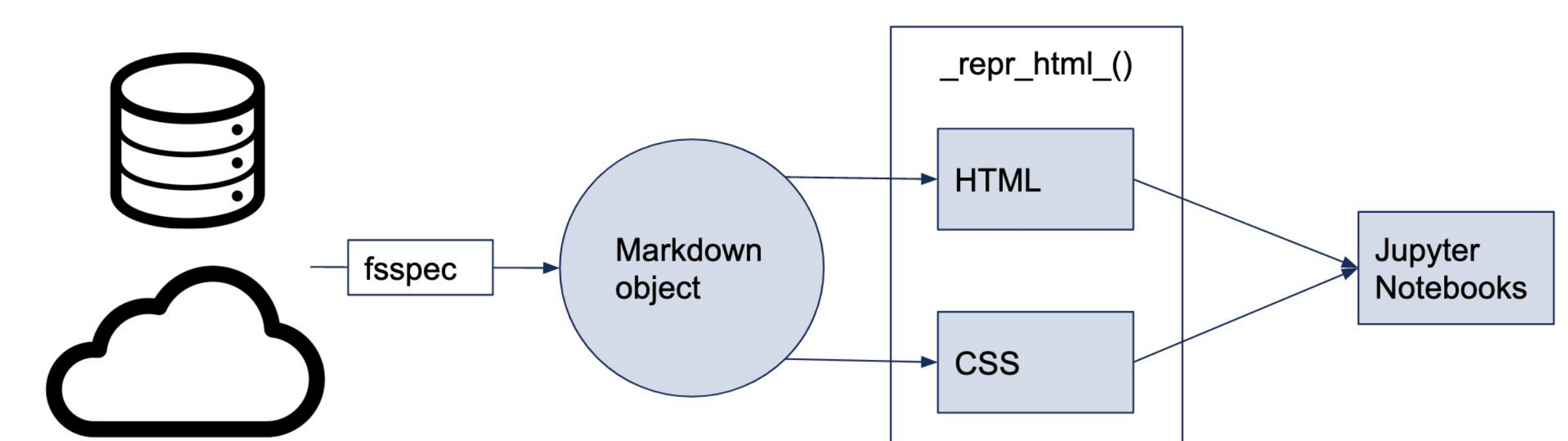
RESULTS



A Cookbook to Teach Intake

Intake is a Python library used to abstract where data is stored and how it is retrieved. To do this it uses objects called catalogs. I created a Project Pythia cookbook to introduce geoscientists to the basics of using Intake. It emphasizes the importance of documenting Intake catalogs. Like most Pythia cookbooks, it is binderized to run interactively in the cloud.

intake-markdown



A Intake Driver for Documenting Data

Intake is designed to be extended by plugins that allow it to work with many data formats and data structures. I created a Intake plugin to load markdown files from Intake catalogs and then display them inline in Jupyter Notebooks. This gives the catalog creator more flexibility in documenting the data in their catalog.

ACKNOWLEDGMENTS

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