Jupyter Notebooks: Your Coding Canvas

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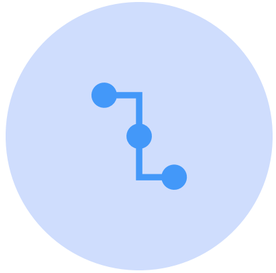
Agenda

Multiple Languages Available

Markdown Cells

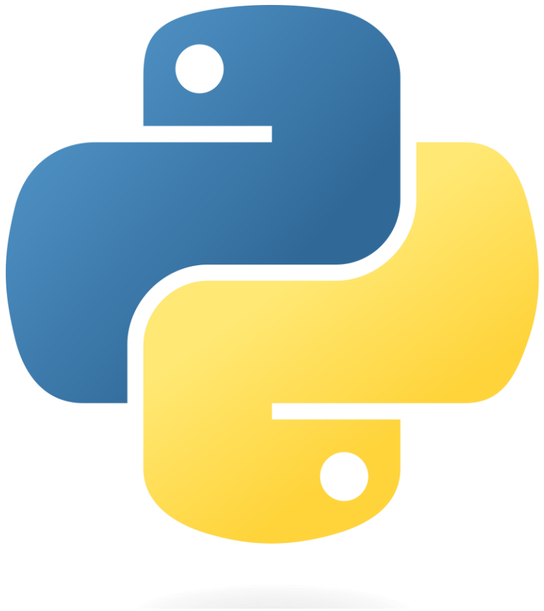
GitHub Integration



Inline output and Portability

Coding in Multiple Languages

Why Choose Just One?

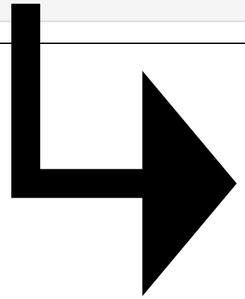


Markdown Cells

Coding Comments = Outdated!

- Add text, images, and formatting within Jupyter Notebooks
- Enhances readability and documentation

```
## Heart Classification
 |Info | Details |
| ---  | --- |
|  DATA | heart_disease.csv |
|  DESCRIPTION | The data set contains measurements on 304 patients, consisting of factors that potentially indicate the presence or
absence of heart disease. |
|PURPOSE | In this example, we will show different binary classification modeling techniques to predict the heart disease. |
| SOURCE | Adapted from "Heart Disease prediction Random forest Classifier https://www.kaggle.com/code/mruanova/heart-disease-
prediction-random-forest-classifier by Mau Rua
```



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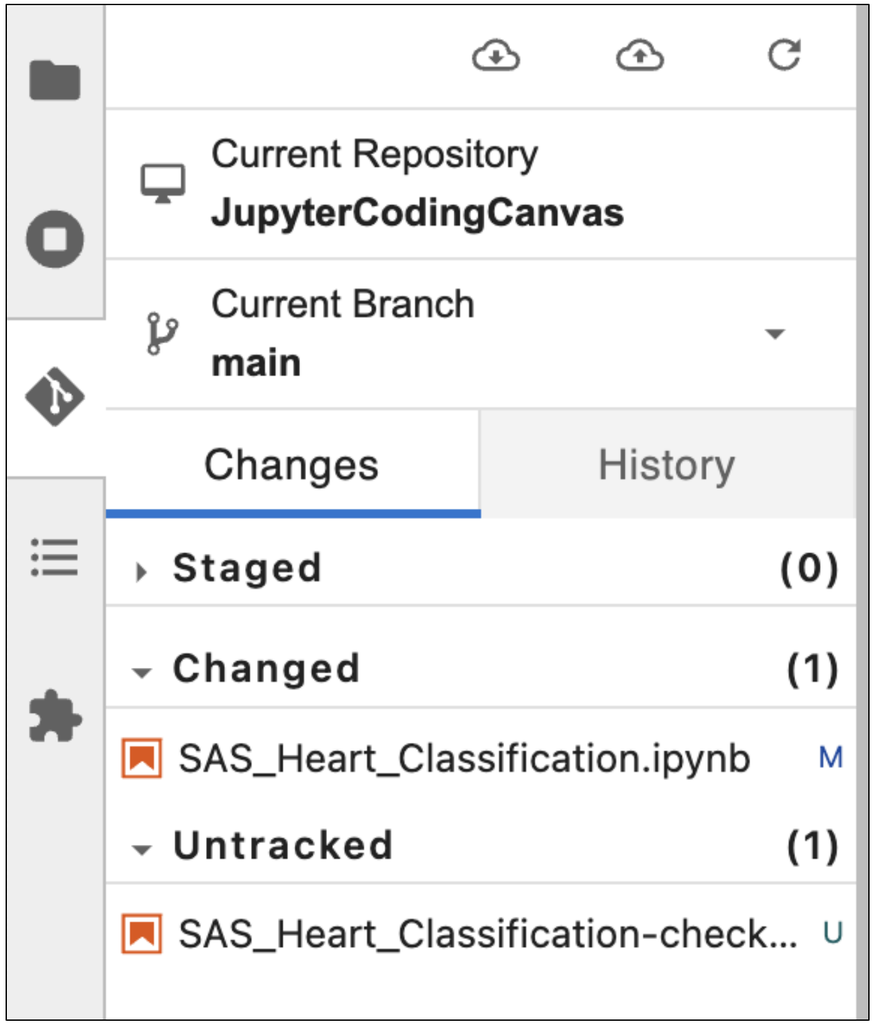
GitHub Integration

Let’s Git Together!

- Version control
- Collaborative coding



Inline Output: Seeing Code and Results Together

Show Your Work!

- Provides immediate feedback to making debugging easier
- Storytelling power
- Output *.ipynb* files include results

Print a few rows to show the original data.

```
title2 'Portion of heart_disease data';
proc print data=heart_disease (obs=5); run;
```

Predicting heart disease using different modeling techniques

Portion of heart_disease data

Obs	target	sex	age	trestbps	chol	thalch	oldpeak	ca	cp	exang	slope	thal	restecg	fbs
1	No heart disease	Male	63	145	233	150	2.3	0	3	0	0	1	0	1
2	With heart disease	Male	67	160	286	108	1.5	3	0	1	1	2	0	0
3	With heart disease	Male	67	120	229	129	2.6	2	0	1	1	0	0	0
4	No heart disease	Male	37	130	250	187	3.5	0	2	0	0	2	1	0
5	No heart disease	Female	41	130	204	172	1.4	0	1	0	2	2	0	0

Let’s Check It Out!

Questions?

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