



# Visual Studio Code and GitHub Codespaces

## The Dream Developer Experience

Develop anywhere, anytime, any device

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*Academic Bytes - Tech In A Few Minutes For Education*

# What is GitHub Codespaces

- Your instant ready to go development box
- Available anywhere, anytime
- On any device with Visual Studio Code in the browser OR
- Visual Studio Code on your machine with just two extensions.
  - Goodbye installs or fighting configurations on your machine
- Preconfigured environments or configure your own

# GitHub Codespaces – Fast, Simple, Customizable

- Cloud managed docker container preconfigured to provide a full-featured development environment.
  - <https://docs.github.com/en/codespaces/setting-up-your-project-for-codespaces/introduction-to-dev-containers#using-the-default-dev-container-configuration>
- Setup a Codespace in minutes.
- Customizable for your project needs with a few clicks.
  - <https://github.com/Microsoft/vscode-dev-containers#adding-a-definition-to-a-project-or-codespace>
- No more worrying about getting a development environment working on a machine.

# GitHub Codespaces – Costs

- Still in beta for individuals and free.
  - Request Access - <https://github.com/features/codespaces/signup>
  - Only takes an hour or two to get activated!
- Educators - get free monthly allowance for your classes.
  - <https://docs.github.com/en/education/manage-coursework-with-github-classroom/integrate-github-classroom-with-an-ide/using-github-codespaces-with-github-classroom#about-the-codespaces-education-benefit-for-verified-teachers>
- Charged per hour while Codespace is active. Can set timeout, default is 30 minutes. Turn on/off Codespaces in GitHub or Visual Studio Code.
- Organizations – Pay as little as \$0.18 an hour. That's less than a cup of coffee for a day's worth of work.
  - \$0.07 a month per GB of space for all your Codespaces. Can delete from GitHub or Visual Studio Code.
  - <https://docs.github.com/en/billing/managing-billing-for-github-codespaces/about-billing-for-codespaces>

# GitHub Codespaces – Worried about costs or connectivity? No Problem!

- Everything you need to run the container locally is already in your repository.
- Run the container locally with Visual Studio Code's free Remote - Containers Extension and docker tools for your operating system - <https://marketplace.visualstudio.com/items?itemName=ms-vscode-remote.remote-containers>

# GitHub Codespaces – To Learn More

- GitHub Codespaces docs - <https://docs.github.com/en/codespaces>
- Setup your project with a default container- <https://docs.github.com/en/codespaces/setting-up-your-project-for-codespaces/introduction-to-dev-containers#using-the-default-dev-container-configuration>
- Python Sample - <https://docs.github.com/en/codespaces/setting-up-your-project-for-codespaces/setting-up-your-python-project-for-codespaces>
- Java Sample - <https://docs.github.com/en/codespaces/setting-up-your-project-for-codespaces/setting-up-your-java-project-for-codespaces>
- Any Repository - <https://docs.github.com/en/codespaces/setting-up-your-project-for-codespaces>
- Using Codespaces in Visual Studio Code - <https://docs.github.com/en/codespaces/developing-in-codespaces/using-codespaces-in-visual-studio-code>
- Educators - Prepare for the next semester with GitHub Global Campus and Codespaces - <https://github.blog/2022-05-09-prepare-for-next-semester-with-github-global-campus-and-codespaces/>
- Get Visual Studio Code - <https://code.visualstudio.com/>

# Github Codespaces – Try It Out!

- This Python and Flask example is open source - <https://github.com/klabranche/pytoh>
- Run it on your own machine or from a browser now.
- Use This Template to copy the repo to your own and play around.
- Follow the readme.md for how to redo the example from scratch
- I take pull requests. :-)

Feel free to reach out to me on twitter <https://twitter.com/klabranche> or email [klabran@hotmail.com](mailto:klabran@hotmail.com)