How to get started in Ruby on Rails with an IDE and Docker

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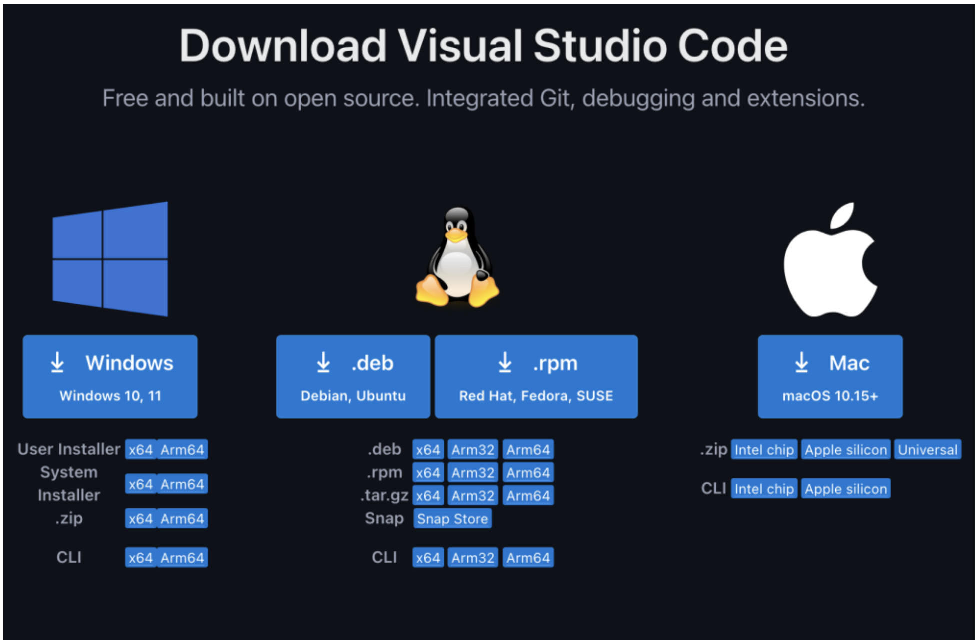
1. IDE

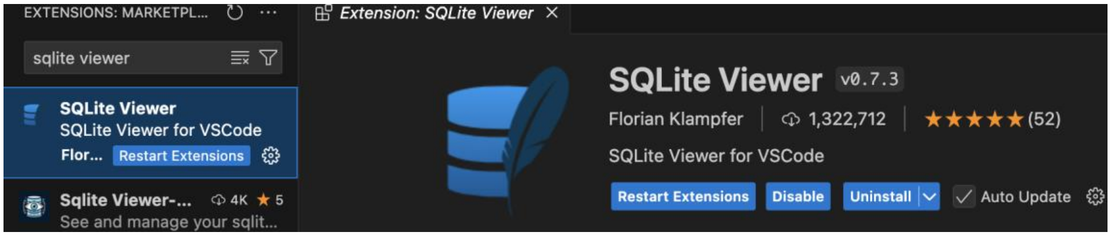
- It is suggested that you use VS Code, as it allows you to run a terminal in your IDE, making one less thing needed up on your screen.
- Go to: https://code.visualstudio.com/download



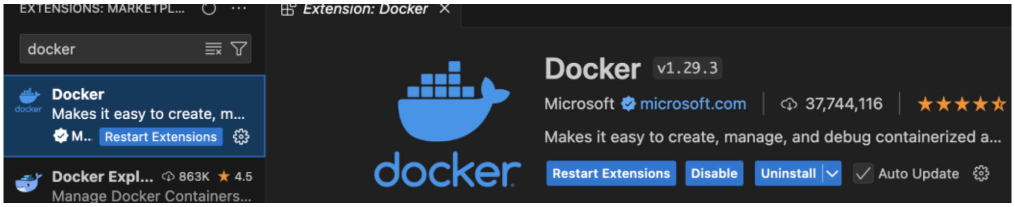
Download Visual Studio Code

Free and built on open source. Integrated Git, debugging and extensions.

- Download the appropriate version for your system.
- Once downloaded, make sure to download these extensions.
  - SQLite Viewer



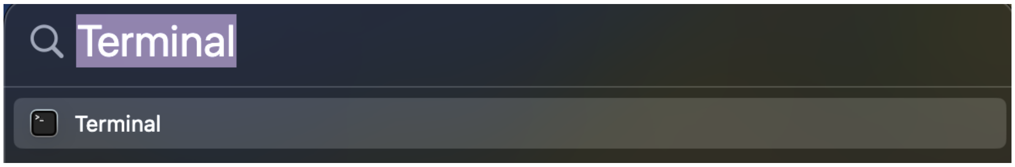
- Docker
  - Note: this does not replace the desktop version!!


EXTENSIONS: MARKETPL...
docker
Docker
Makes it easy to create, m...
M.. Restart Extensions
Docker Expl... 863K ★ 4.5
Manage Docker Containers...
Extension: Docker
docker
Docker v1.29.3
Microsoft microsoft.com | 37,744,116 | ★★★★★
Makes it easy to create, manage, and debug containerized a...
Restart Extensions
Disable
Uninstall
Auto Update

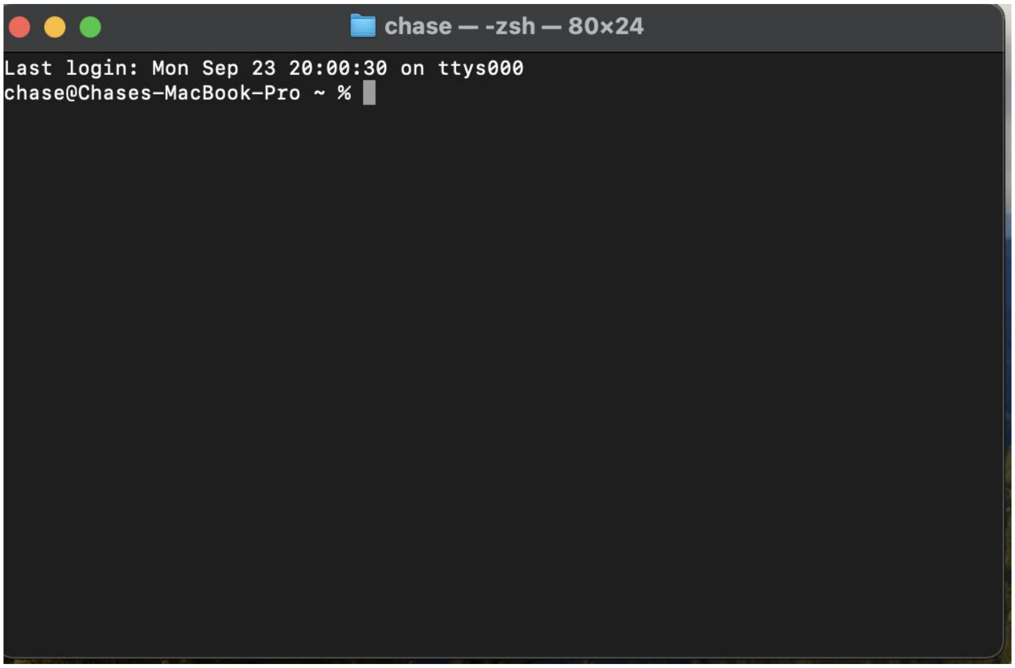
- Here is a guide to help you get familiar with VSCode
  - https://code.visualstudio.com/docs/introvideos/basics

2. Command Line Tools

- In Ruby on Rails projects, you will need to use the command line often. For example, you will be starting your server using command line, using meta-programming to create entire classes using scaffolding and more!
- Windows OS
  - It is recommended that you use a tool such as PowerShell on Windows OS, as the default one tends to be problematic.
  - https://learn.microsoft.com/en-us/powershell/?view=powershell-7.4
    - Follow this link to get started!
- Mac OS
  - If you are on a mac, you have it a bit easier as the Terminal is already built in and easy to use!
    - Use Command + Space bar to bring up your search function
    - In the search bar, type Terminal



    - Click on it, and you have your command line tool!

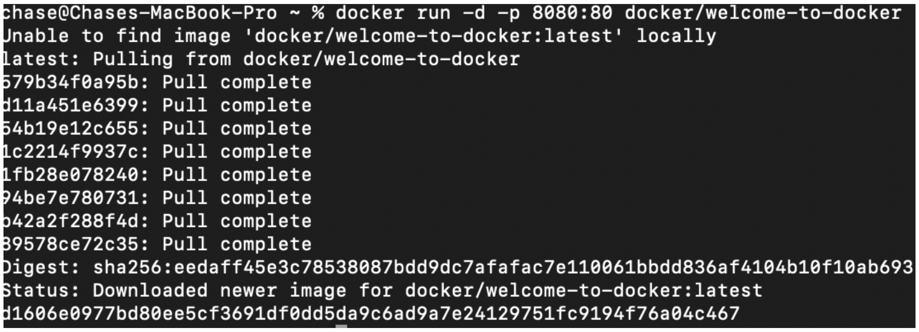


```
Last login: Mon Sep 23 20:00:30 on ttys000
chase@Chases-MacBook-Pro ~ %
```

- Here is what the Terminal looks like!
  - Visit this website to learn about common commands used!
    - https://gist.github.com/bradtraversy/cc180de0edee05075a6139e42d5f28ce

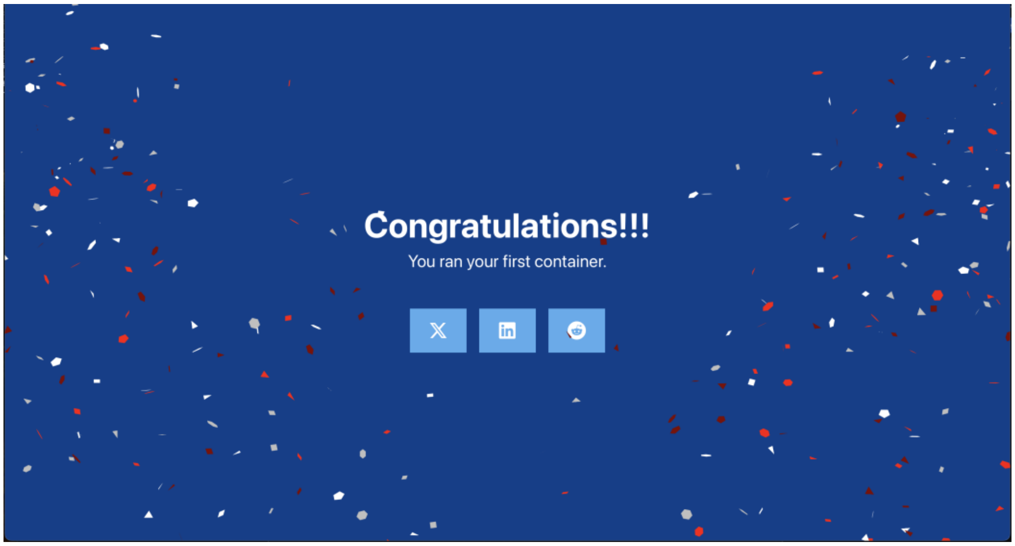
Docker

- Follow this link and download the Docker Desktop application
  - https://docs.docker.com/get-started/get-docker/
- Once downloaded, to familiarize yourself with Docker follow Docker's guide of getting started with Docker
  - To test that docker is correctly installed, please test using
    - docker run -d -p 8080:80 docker/welcome-to-docker
      - This will download and create a container.
      - Your command line tool will look something like this



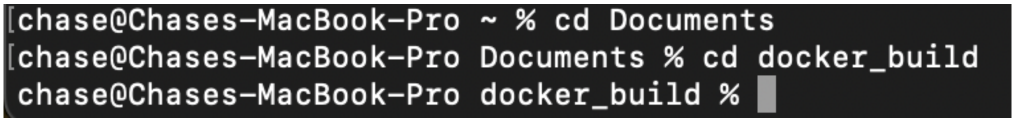
```
chase@Chases-MacBook-Pro ~ % docker run -d -p 8080:80 docker/welcome-to-docker
Unable to find image 'docker/welcome-to-docker:latest' locally
latest: Pulling from docker/welcome-to-docker
579b34f0a95b: Pull complete
d11a451e6399: Pull complete
54b19e12c655: Pull complete
1c2214f9937c: Pull complete
1fb28e078240: Pull complete
94be7e780731: Pull complete
b42a2f288f4d: Pull complete
89578ce72c35: Pull complete
Digest: sha256:eedaff45e3c78538087bdd9dc7afafac7e110061bbdd836af4104b10f10ab693
Status: Downloaded newer image for docker/welcome-to-docker:latest
d1606e0977bd80ee5cf3691df0dd5da9c6ad9a7e24129751fc9194f76a04c467
```

        - This should bring up the following screen.



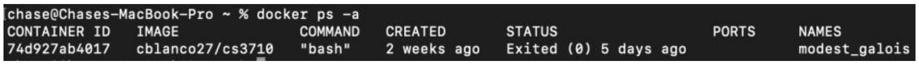
    - Now that you have ran your first container, familiarize yourself with docker by following the introduction on Docker's website, linked below.
    - https://docs.docker.com/get-started/introduction/
- Now that you understand how docker works, it is time to create your own image to create your portfolio app in.
    - First, create a directory in your computer for your docker files.
        - Mine is named docker_build, so I know where all my docker stuff should be.

- Second, you will visit the following link, download the resources and move them into the directory you just made.
  - https://drive.google.com/drive/folders/1_Mg-8M8zw39ZyOa3DLpAn4AR0uaP_T8x
- Next, using your command line tool go into the directory you made with the new files included.



```
[chase@Chases-MacBook-Pro ~ % cd Documents
[chase@Chases-MacBook-Pro Documents % cd docker_build
 chase@Chases-MacBook-Pro docker_build % 
```

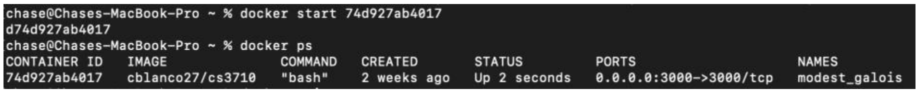
- While inside this directory, try running this command with your information added
  - docker build –t [dockerUsername]/[image_name] .
  - For example, here is how mine looked
    - docker build –t [cblanco27]/[cs3710] .
  - If you are running into issues, please make sure everything is lowercase!
  - This command will build the image using the files provided and put into your directory.
- Now it is time to run the newly created image!
  - Try the command
  - docker run –it –p 3000:3000 –v $(pwd):/workspace [dockerUsername]/[image_name]
    - For example, here is what mine looked like: docker run –it –p 3000:3000 –v $(pwd):/workspace [cblanco27]/[cs3710]
- Congratulations, you just made a container! You will want to use this container continually, so here is how you open the same container every time!
  - Using the following command will show you what containers you currently have in docker.
    - docker ps –a



```
[chase@Chases-MacBook-Pro ~ % docker ps -a
CONTAINER ID   IMAGE             COMMAND   CREATED       STATUS                    PORTS     NAMES
74d927ab4017   cblanco27/cs3710  "bash"    2 weeks ago   Exited (0) 5 days ago               modest_galois
```

    - Here it shows the container ID as well as the name of all containers I currently have.
  - To open a container all you need to do is the following
    - Copy your desired container ID
    - Run the command: docker start [containerID]

        - For example, mine would be:
            - docker start 74d927ab4017



```
chase@Chases-MacBook-Pro ~ % docker start 74d927ab4017
d74d927ab4017
chase@Chases-MacBook-Pro ~ % docker ps
CONTAINER ID   IMAGE             COMMAND   CREATED       STATUS         PORTS                    NAMES
74d927ab4017   cblanco27/cs3710   "bash"    2 weeks ago   Up 2 seconds   0.0.0.0:3000->3000/tcp   modest_galois
```

    - If you are ever unsure of what container you have open, use the command ‘docker ps’ to check what is currently running!

- You should now have the tools to start working on your Ruby on Rails project using Docker!!