

GIT, GITHUB, & FINAL PROJECT LAB

WEEKLY OVERVIEW

WEEK 8

Responsive Basics / Final Project Lab

WEEK 9

Students Choice / Final Project Lab

WEEK 10

Final Project Lab / Presentations

LEARNING OBJECTIVES

- › Define a version control system (Git) and explain its benefits
- › Connect local repositories to remote repositories using the GitHub app
- › Continue working on final projects

AGENDA

Debugging HTML/CSS

Git & Github

Final Projects Lab

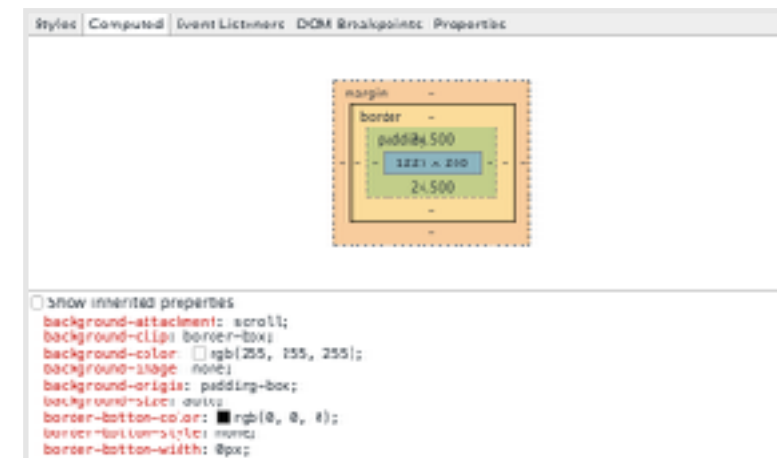
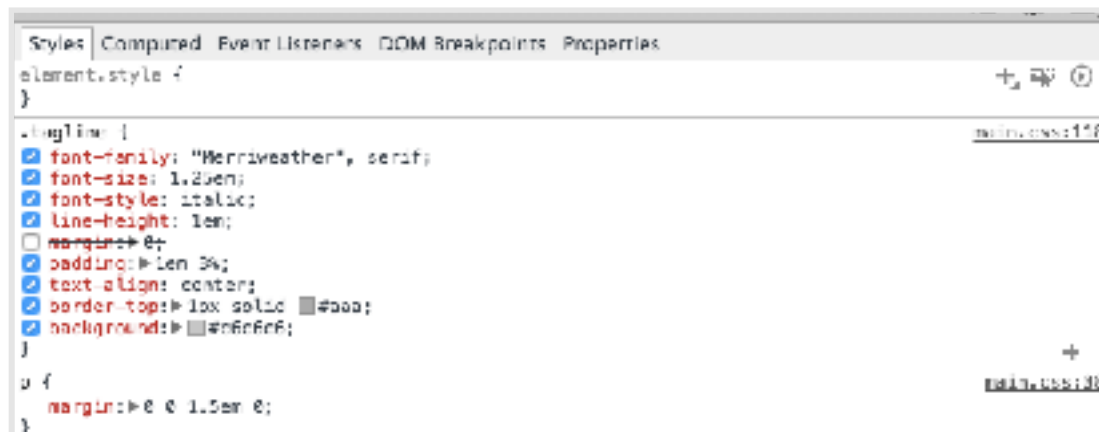
REFACTOR

DEBUGGING HTML/CSS

DEBUGGING — HTML & CSS

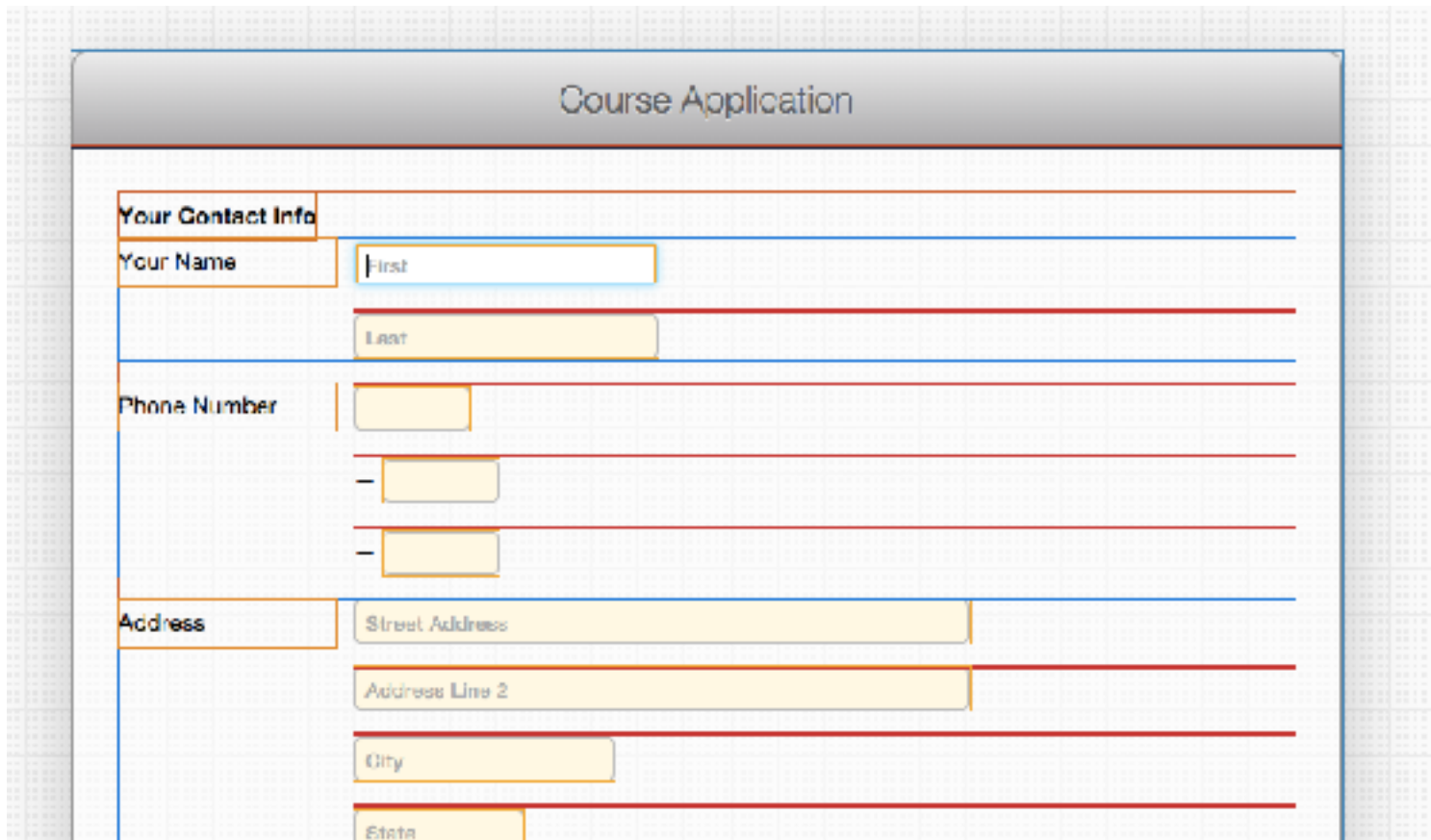
1. The first thing you should always do is right click, inspect element.

- ▶ Select which element isn't appearing like it should be in the elements panel.
- ▶ Hover over the element in the HTML panel to see where the padding (green) is and margins (orange) are.
- ▶ Take a look at the CSS styles that are being applied in the styles panel. Check and uncheck the checkboxes to see how styles are being applied.
- ▶ If something is crossed out, it could be a specificity issue
- ▶ Check the "computed" tab to see how the browser is computing your styles.



DEBUGGING — HTML & CSS

2. Layout giving you trouble? Add a border to everything in your CSS, or use the [Pesticide](#) Chrome/Safari extension to do the same



The image shows a web form titled "Course Application" with a light gray header bar. The form is set against a light gray grid background. It contains several sections of input fields:

- Your Contact Info**: A label in an orange box on the left.
 - Your Name**: A label in an orange box on the left, followed by two input fields: "First" (with a light blue border) and "Last" (with a yellow border).
 - Phone Number**: A label in an orange box on the left, followed by three input fields: the first has a yellow border, the second has a light blue border, and the third has a yellow border.
- Address**: A label in an orange box on the left, followed by five input fields: "Street Address" (yellow border), "Address Line 2" (yellow border), "City" (light blue border), and "State" (yellow border).

DEBUGGING — BROWSER INCONSISTENCIES

4. Check the site in different browsers (Chrome, Safari and Firefox). If there are inconsistencies:
 - ▶ Make sure you're using a reset stylesheet, like `normalize.css` to handle browser inconsistencies.
 - ▶ Use <http://pleeease.io/play/> to make sure you're including all the right browser prefixes

WHAT'S NEXT

GIT AND GITHUB

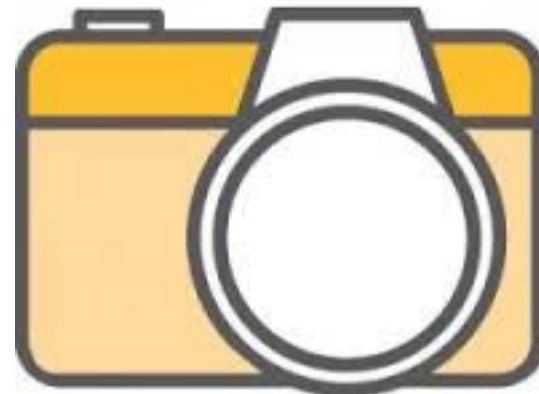
WHAT'S NEXT

KEY VOCABULARY TERMS

WHAT IS GIT?

GIT

- ▶ A **version control** program that saves the state of your project's files and folders
- ▶ Basically, it takes a "snapshot" of what all your files look like at a moment and stores a reference to that "snapshot"



WHAT IS A REPOSITORY?

REPOSITORY:

- ▶ **Central location** in which data - typically about a project - is stored and managed



WHAT'S NEXT

WHAT IS GITHUB?

WHAT IS GITHUB?

GITHUB

- **Platform** that makes it easy to manage git repositories.
- Similar to Dropbox or Google Drive, but for code.
- Stores a history of files and the changes that happen within each changed document.
- Hosts files on the cloud so you can share the finished product with other people.
- **Git** - the technology that Github is based on top of - was designed to allow for multiple engineers to work on the same project.

GitHub



WHY USE GITHUB?



HISTORY

- ▶ Since GitHub stores a history of the code, it allows developers to go back in time if something breaks.



COLLABORATION

- ▶ Allows multiple developers to work on the same project. Much like Google Drive lets multiple people collaborate on the same document, GitHub allows this for code.
- ▶ You can see who worked on what.



FEEDBACK

- ▶ GitHub allows for feedback to be given on the code which, hopefully, increases code quality.

ACTIVITY



EXERCISE

KEY OBJECTIVE

Define Git and explain the benefits of using a version control system

TIMING

1 min

1. Turn to partner and discuss

2 min

2. Share with rest of class

WHAT'S NEXT

DEPLOYING FINAL PROJECTS

ACTIVITY



EXERCISE

KEY OBJECTIVE

- ▶ Connect local repositories to remote repositories using the GitHub app

TYPE OF EXERCISE

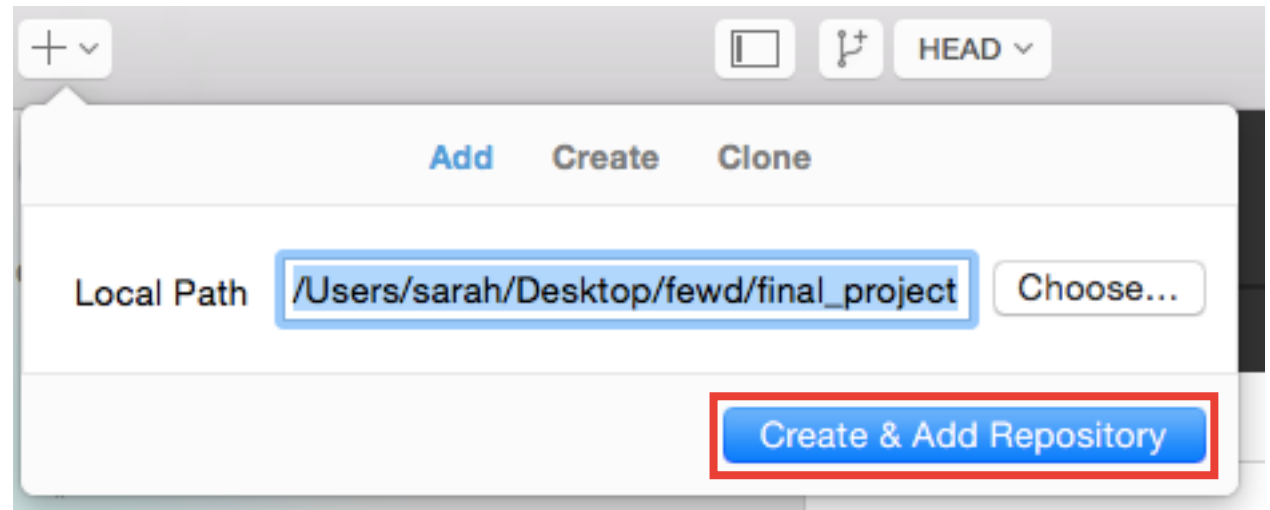
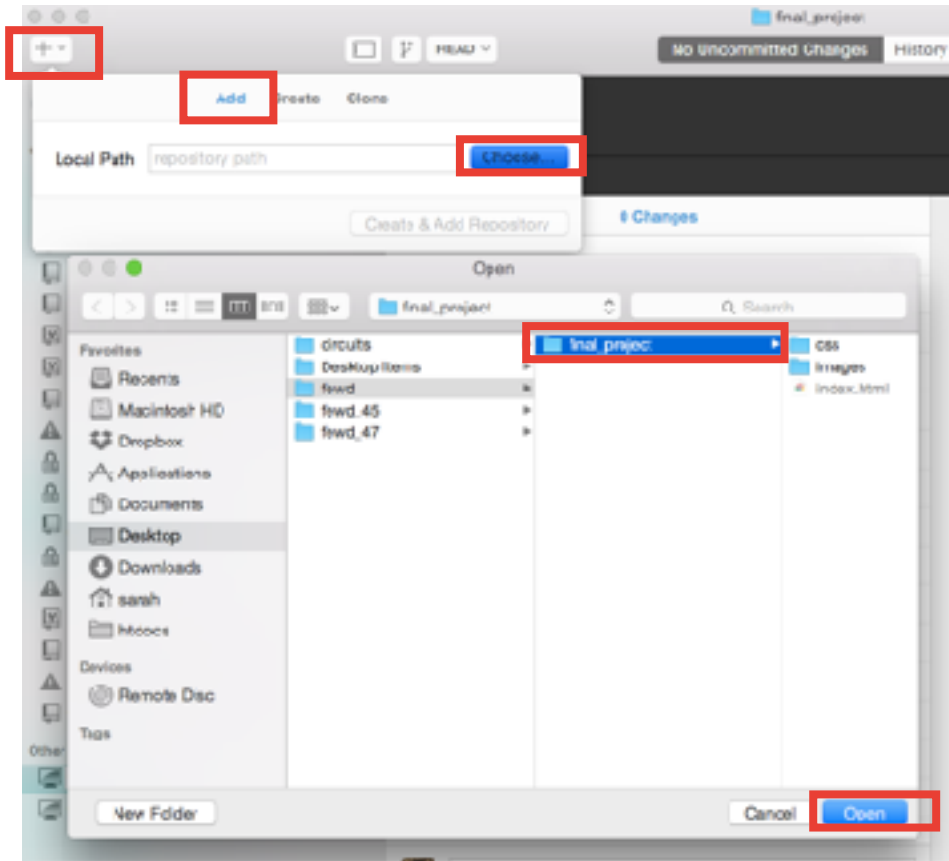
- ▶ Individual/Partner

TIMING

6 min

1. If you don't already have a GitHub account, go to github.com, click Sign Up, and create an account.
2. Download GitHub Desktop from <https://desktop.github.com>, then install it.
3. Open GitHub Desktop, go to Preferences > Accounts, then enter your GitHub username and password and sign in.

SETUP



WORKFLOW

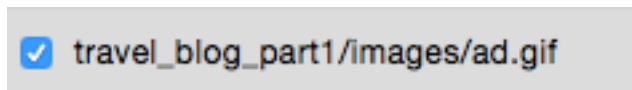
IN VISUAL STUDIO CODE:

Make sure all your changes are saved.

IN THE GITHUB APP:

ADD

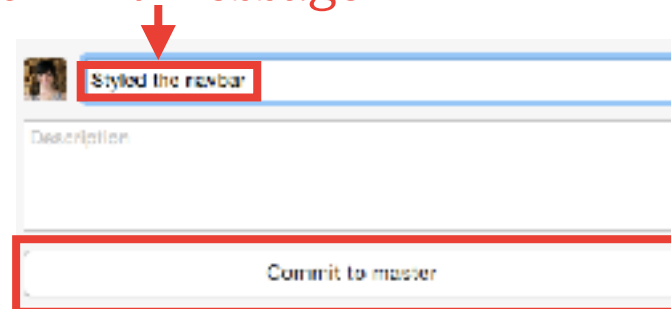
Make sure the boxes next to each file you've edited are checked.



COMMIT

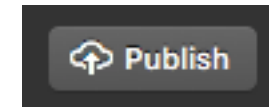
Enter a commit message and click "Commit to master."

commit message



PUSH

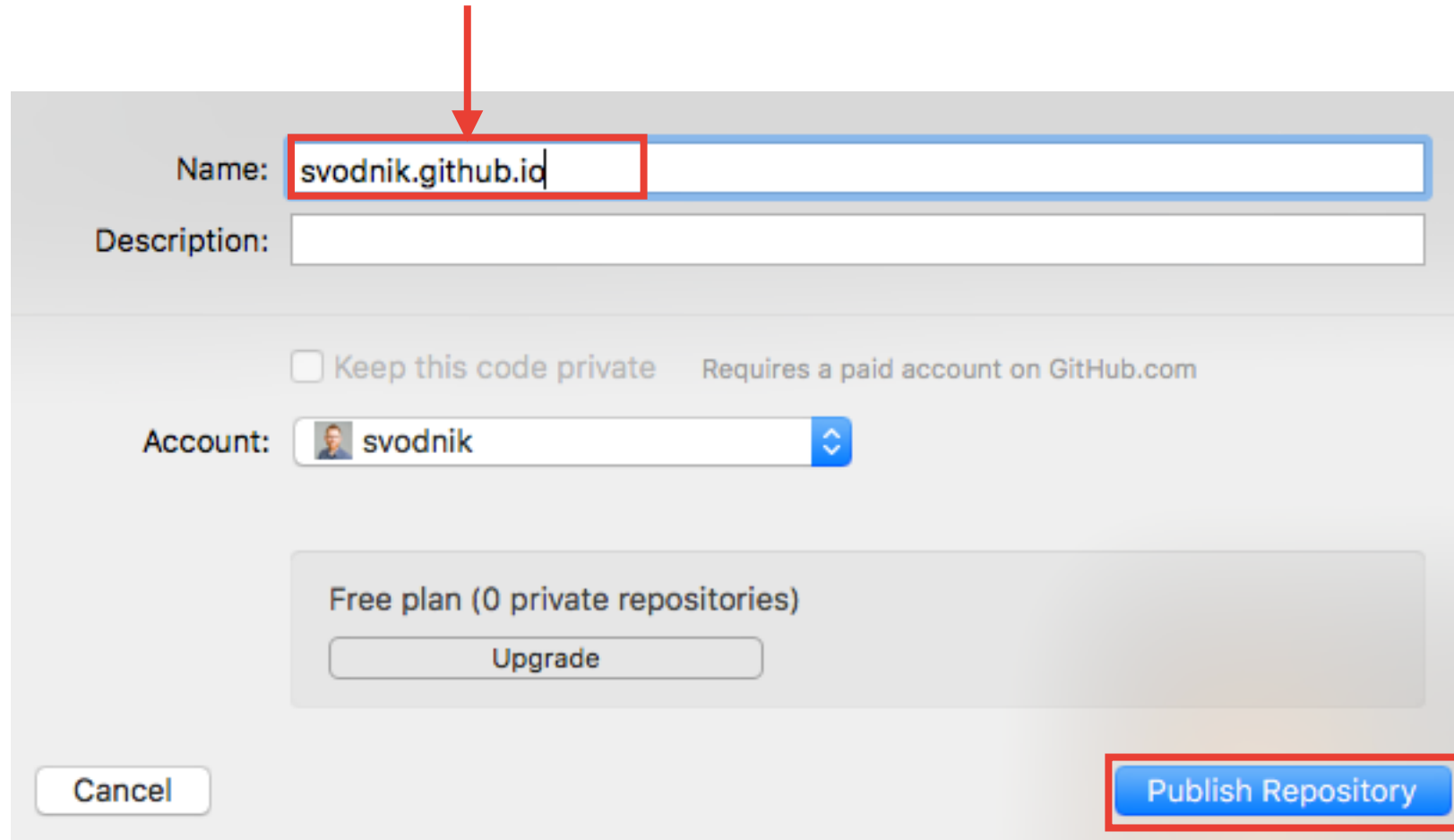
Click "Publish" in upper right corner.



SETUP

IN THE GITHUB APP:

username.github.io




The screenshot shows the GitHub repository creation dialog. A red arrow points from the text 'username.github.io' to the 'Name' input field, which contains 'svodnik.github.io'. The 'Publish Repository' button at the bottom right is also highlighted with a red rectangle. Other elements include a 'Description' field, a 'Keep this code private' checkbox with a note 'Requires a paid account on GitHub.com', an 'Account' dropdown showing 'svodnik', a 'Free plan (0 private repositories)' section with an 'Upgrade' button, and a 'Cancel' button at the bottom left.

Name:

Description:

☐ Keep this code private Requires a paid account on GitHub.com

Account:  svodnik

Free plan (0 private repositories)

WHAT'S NEXT

UPDATING SITE

WORKFLOW

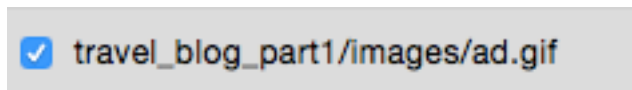
IN VISUAL STUDIO CODE:

Make sure all your changes are saved.

IN THE GITHUB APP:

ADD

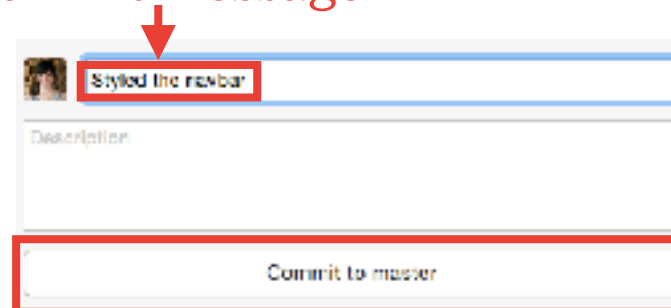
Make sure the boxes next to each file you've edited are checked.



COMMIT

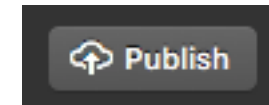
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commit message



PUSH

Click "Publish" in upper right corner.



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EXIT TICKETS!