

# MOBILE DEVELOPMENT

## INTRO TO INTERFACE BUILDER

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# LEARNING OBJECTIVES

- › Review and share your apps. Address any questions
- › Review concepts from last class.
- › Learn to draw and read system diagrams.
- › Learn the logistics of our course's homework submission process with Github.

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**REVIEW: YOUR APPS**

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**REVIEW YOUR APPS**

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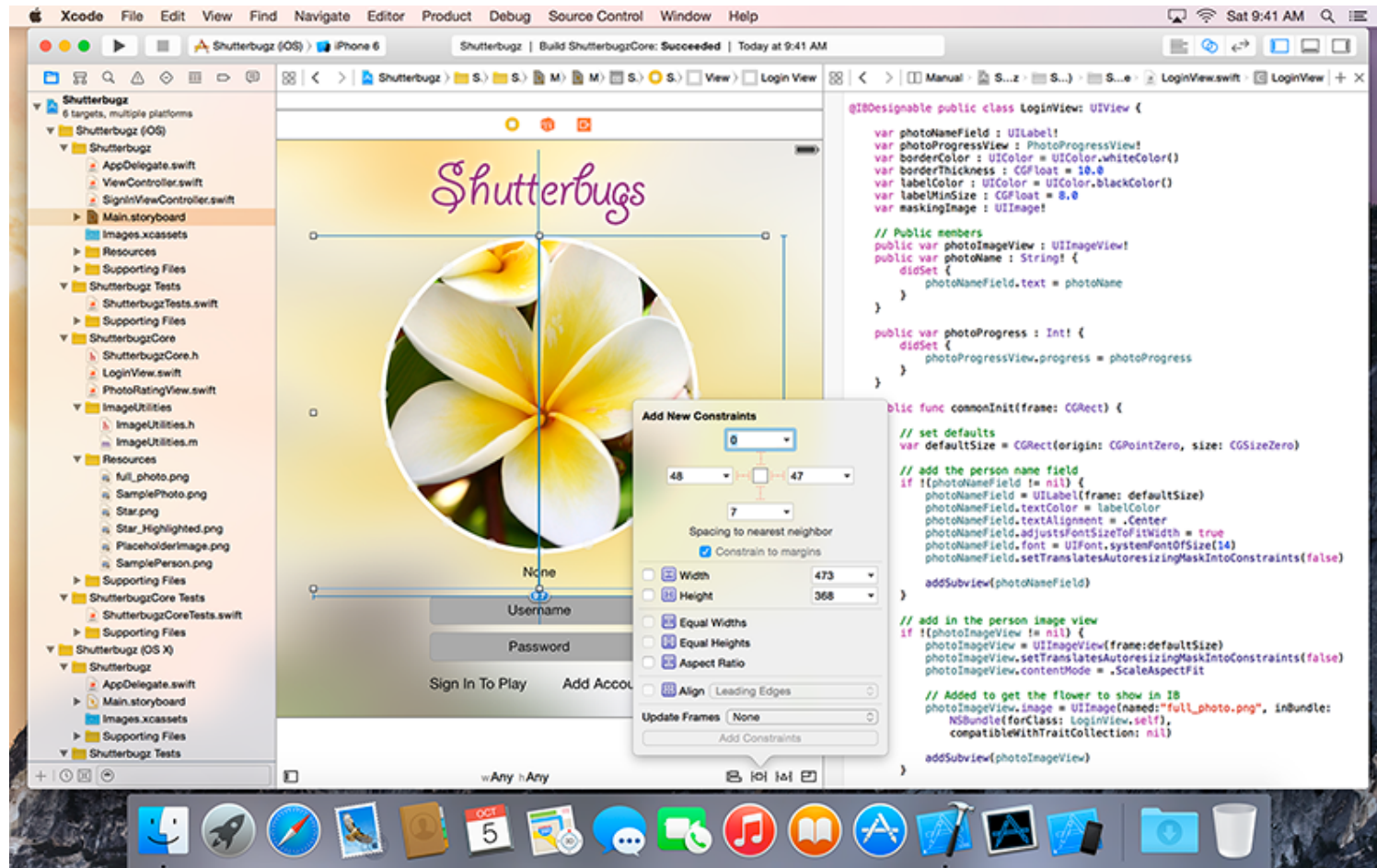
**GETTING STARTED**

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# DEV WORKFLOW AND STORYBOARDS

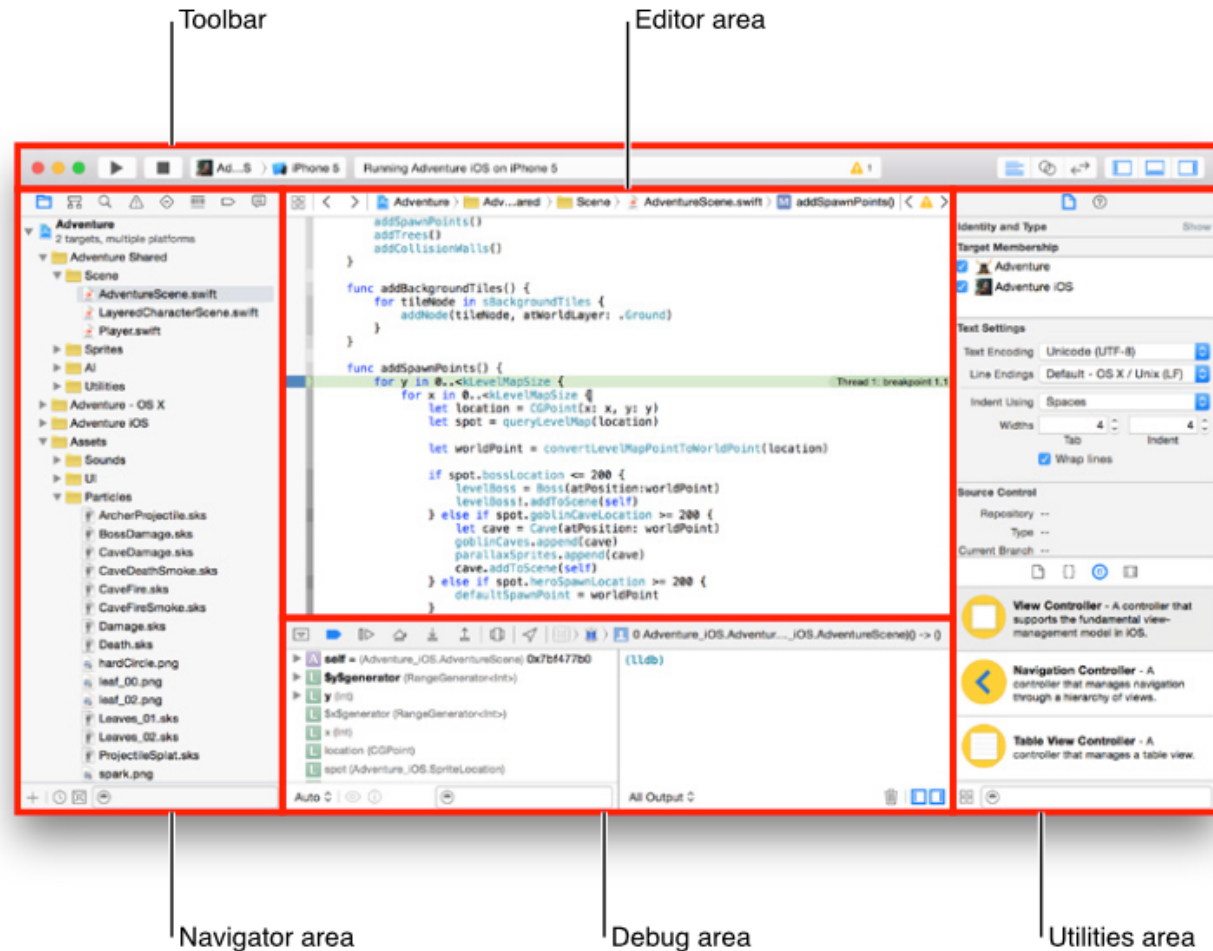
# GETTING STARTED

# XCODE REVIEW



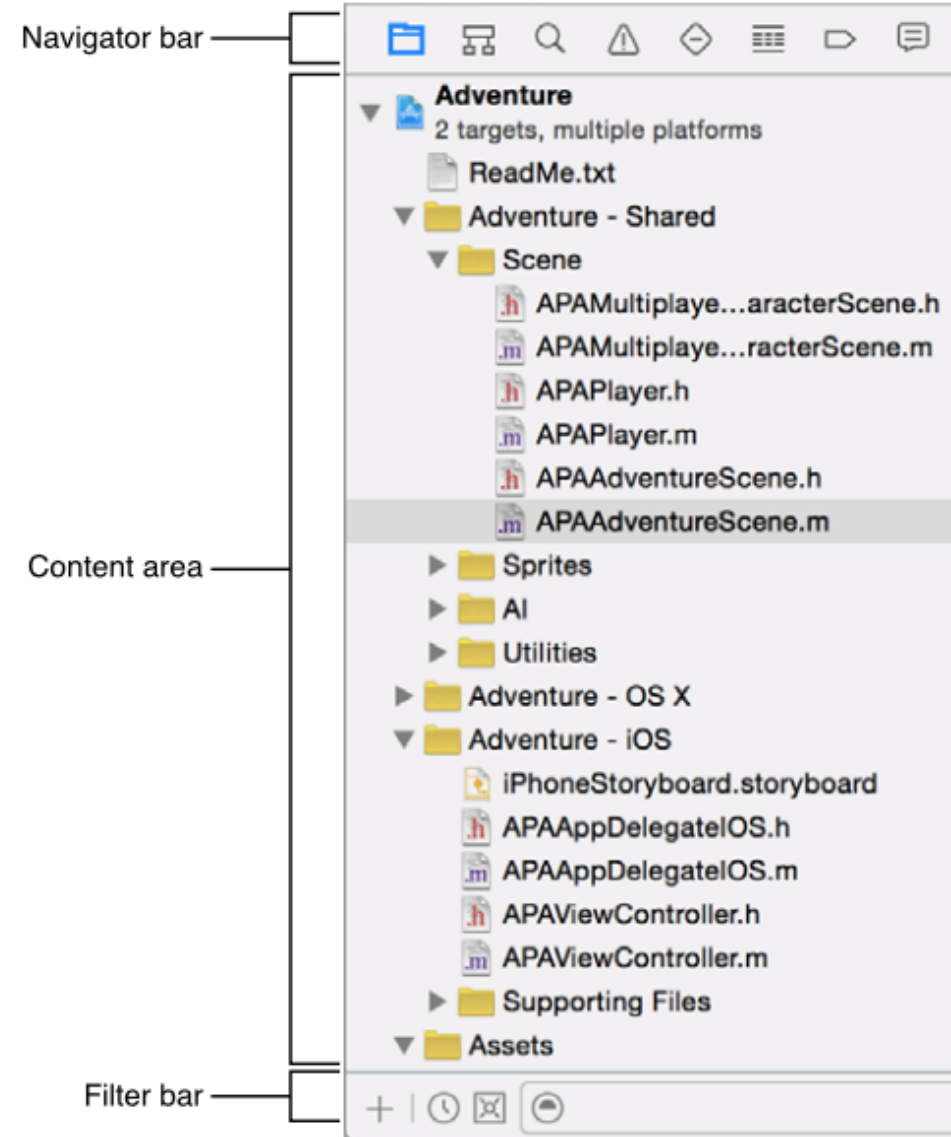
# GETTING STARTED

# NAVIGATING XCODE



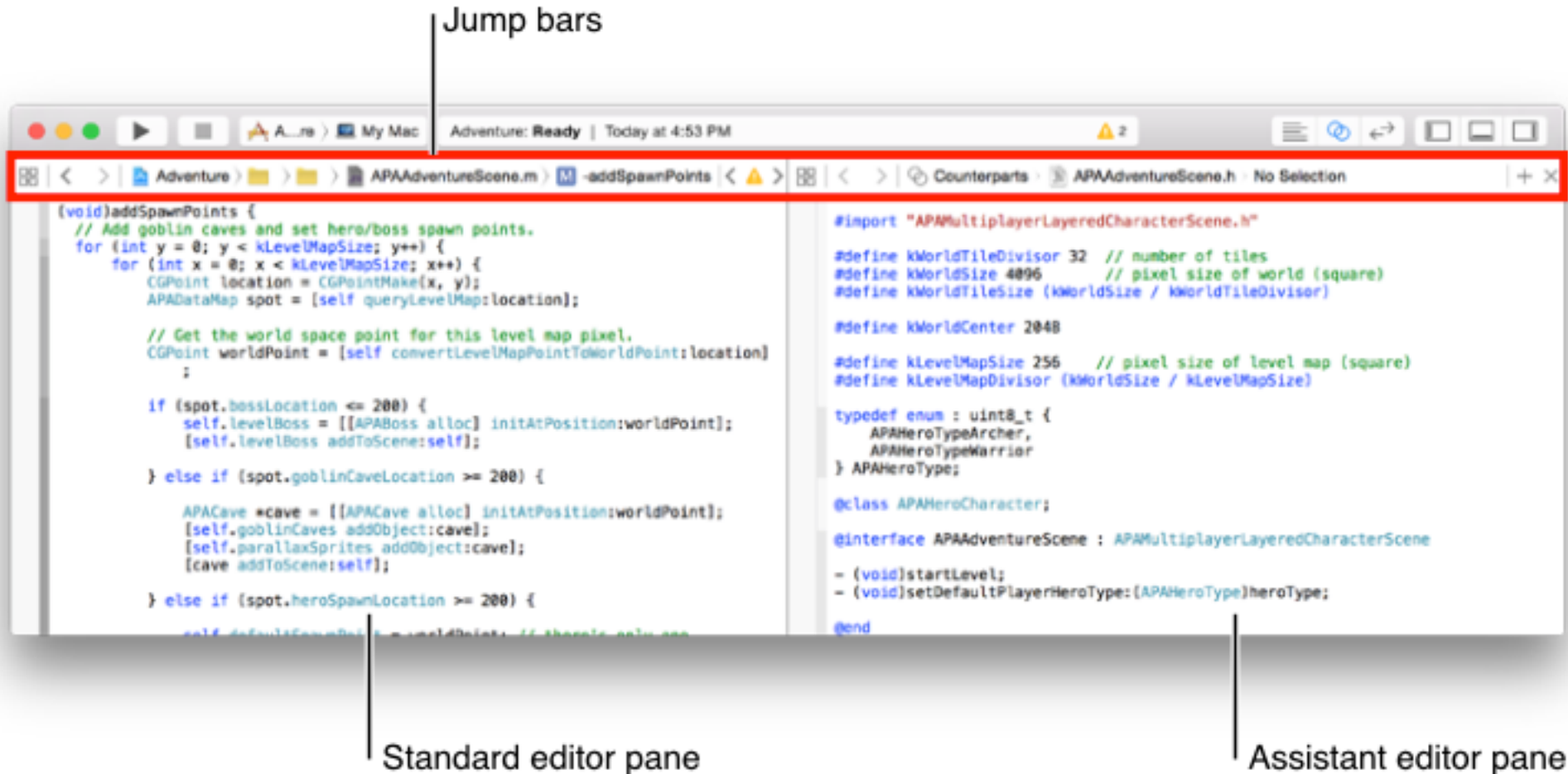
## GETTING STARTED

# NAVIGATOR AREA



## GETTING STARTED

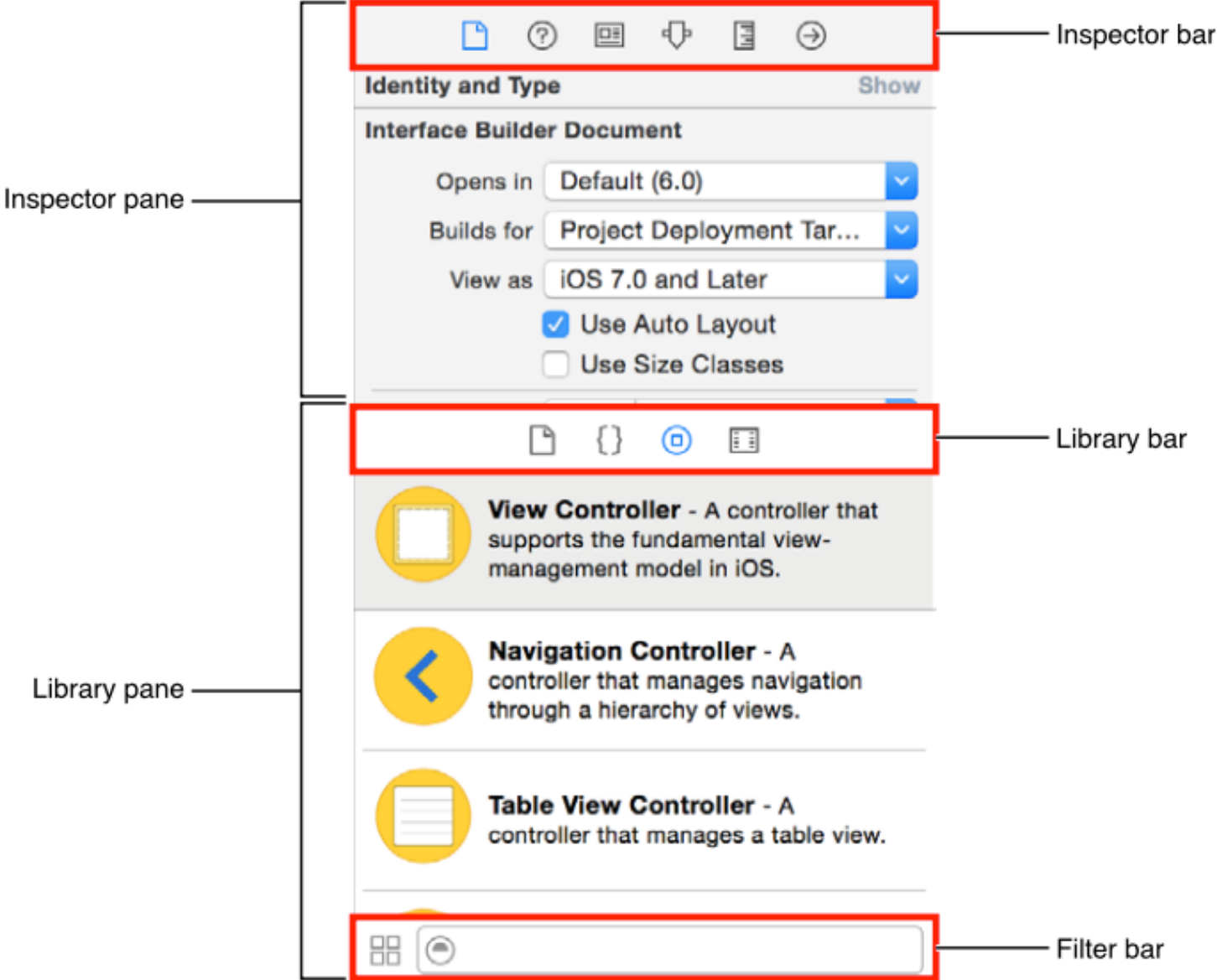
# JUMP BAR AND EDITOR PANES





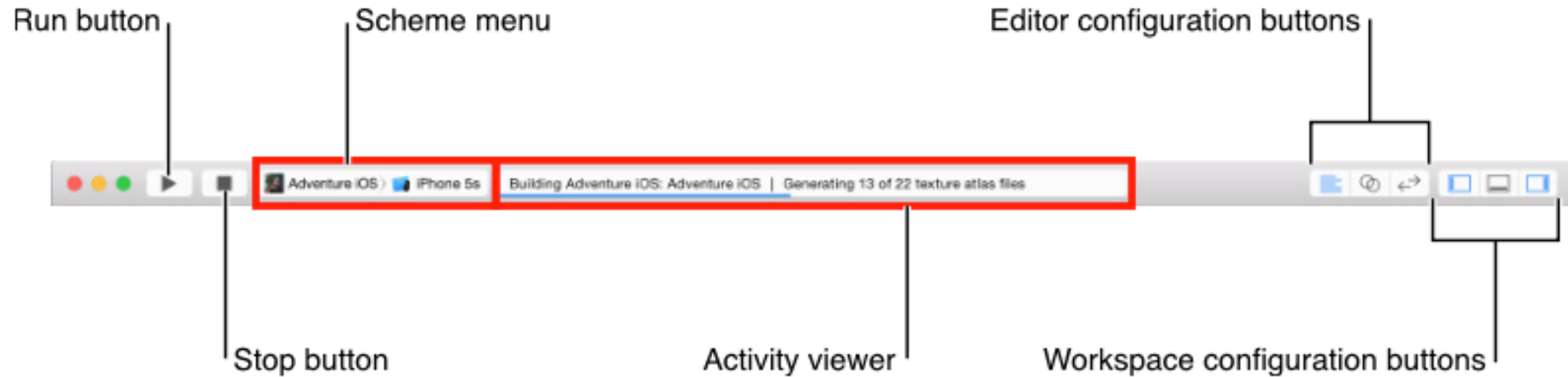
# GETTING STARTED

# UTILITIES AREA



## GETTING STARTED

# WORKSPACE TOOLBAR



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## GETTING STARTED

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# DEV WORKFLOW

- Run Xcode
- Create new project
- Add user interface elements to project
- Change user interface element properties
- Discuss the different project templates

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**GETTING STARTED**

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**TO XCODE!**

# **REVIEW: DEV WORKFLOW**

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## REVIEW: DEV WORKFLOW

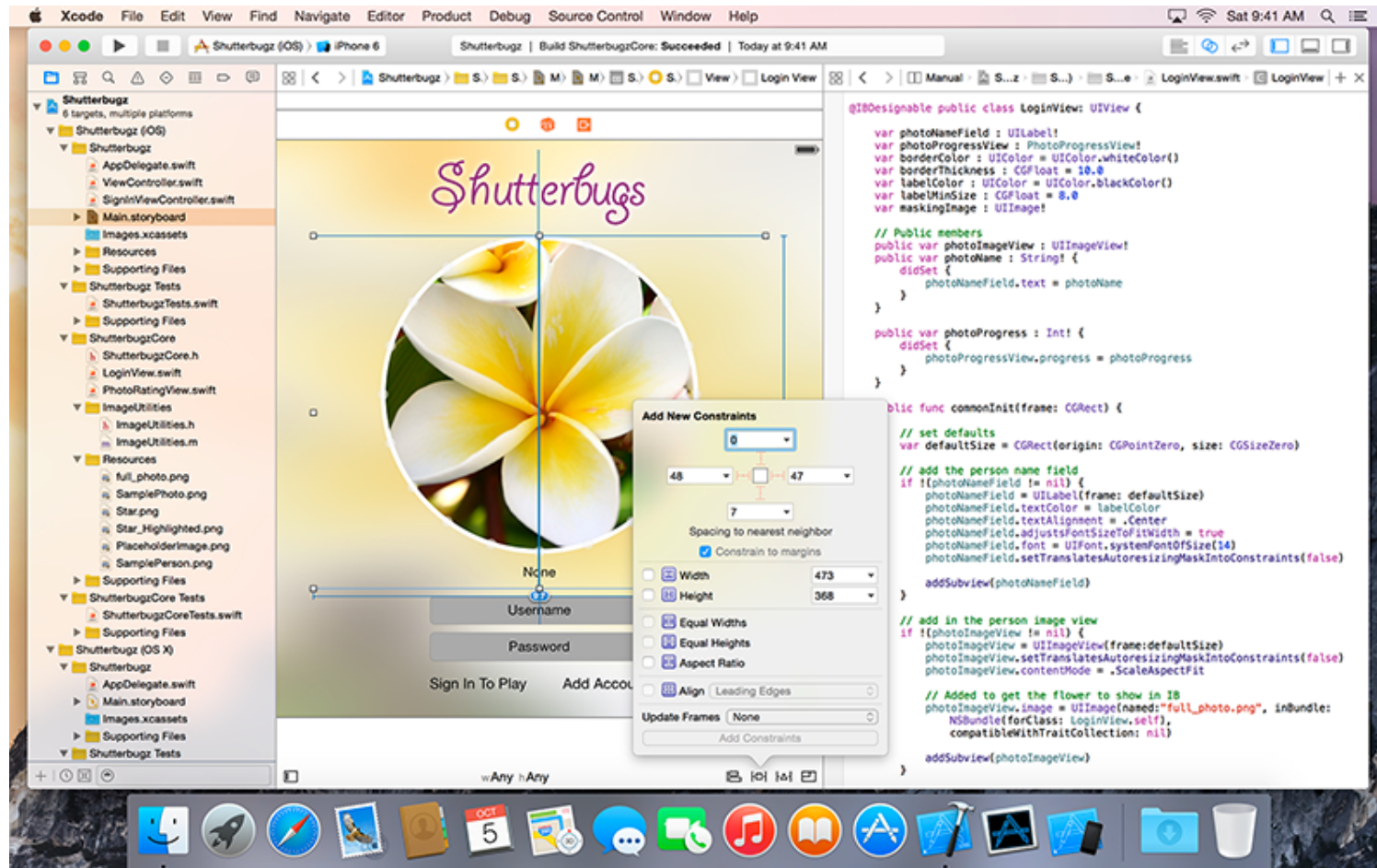
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# DEV WORKFLOW OVERVIEW

- Run Xcode
- Create new project
- Briefly discuss the different project templates
- Add user interface elements to project
- Change user interface element properties
- Build / run the app
- Iterate
- Post to Github when done

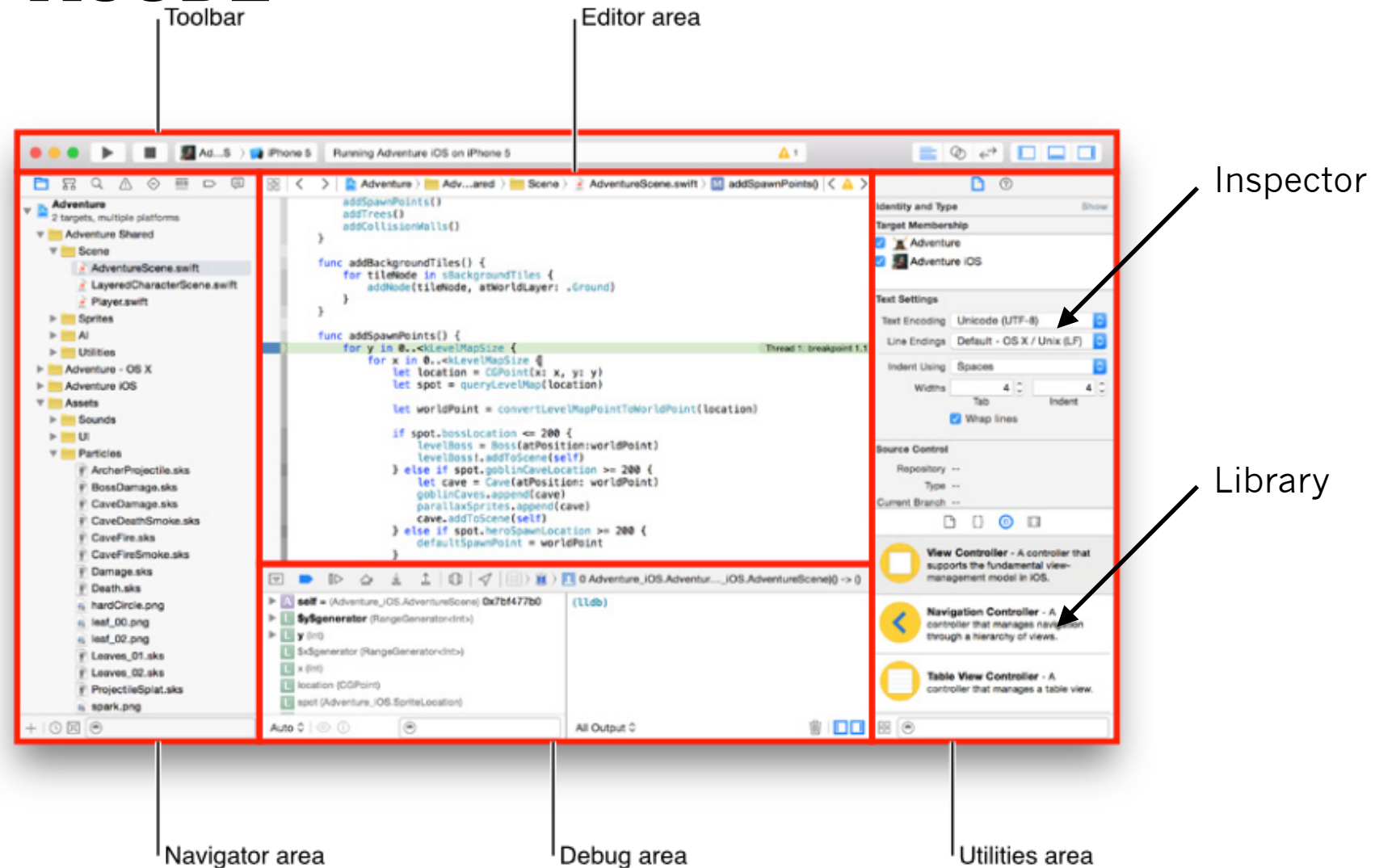
# REVIEW: DEV WORKFLOW

## WHAT IS XCODE?



## REVIEW: DEV WORKFLOW

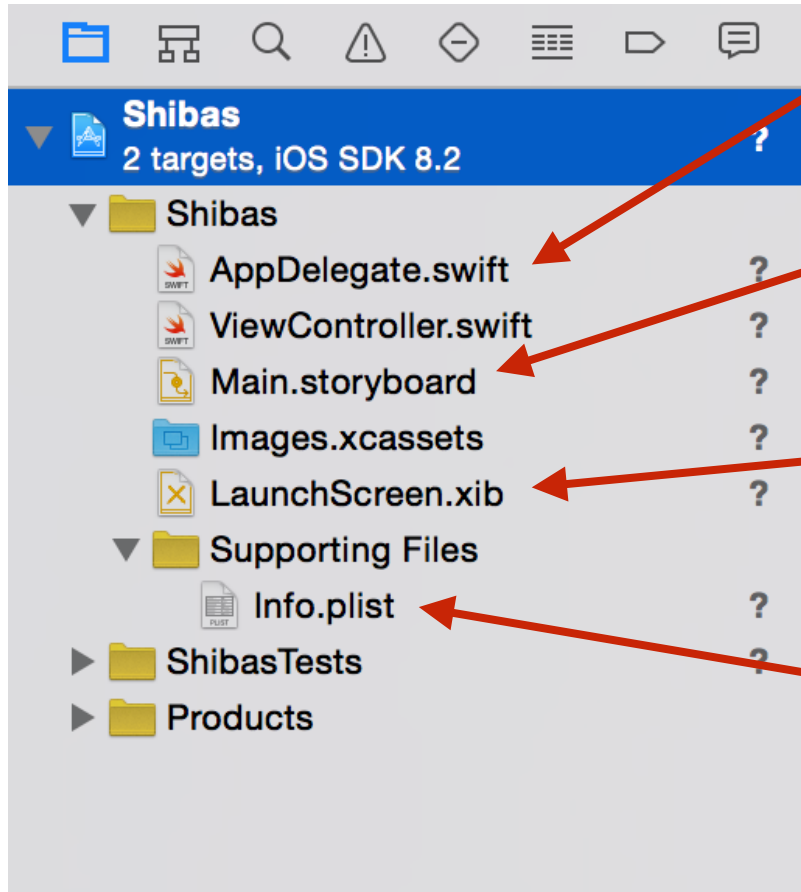
# NAVIGATING XCODE





## REVIEW: DEV WORKFLOW

# FILE TYPES

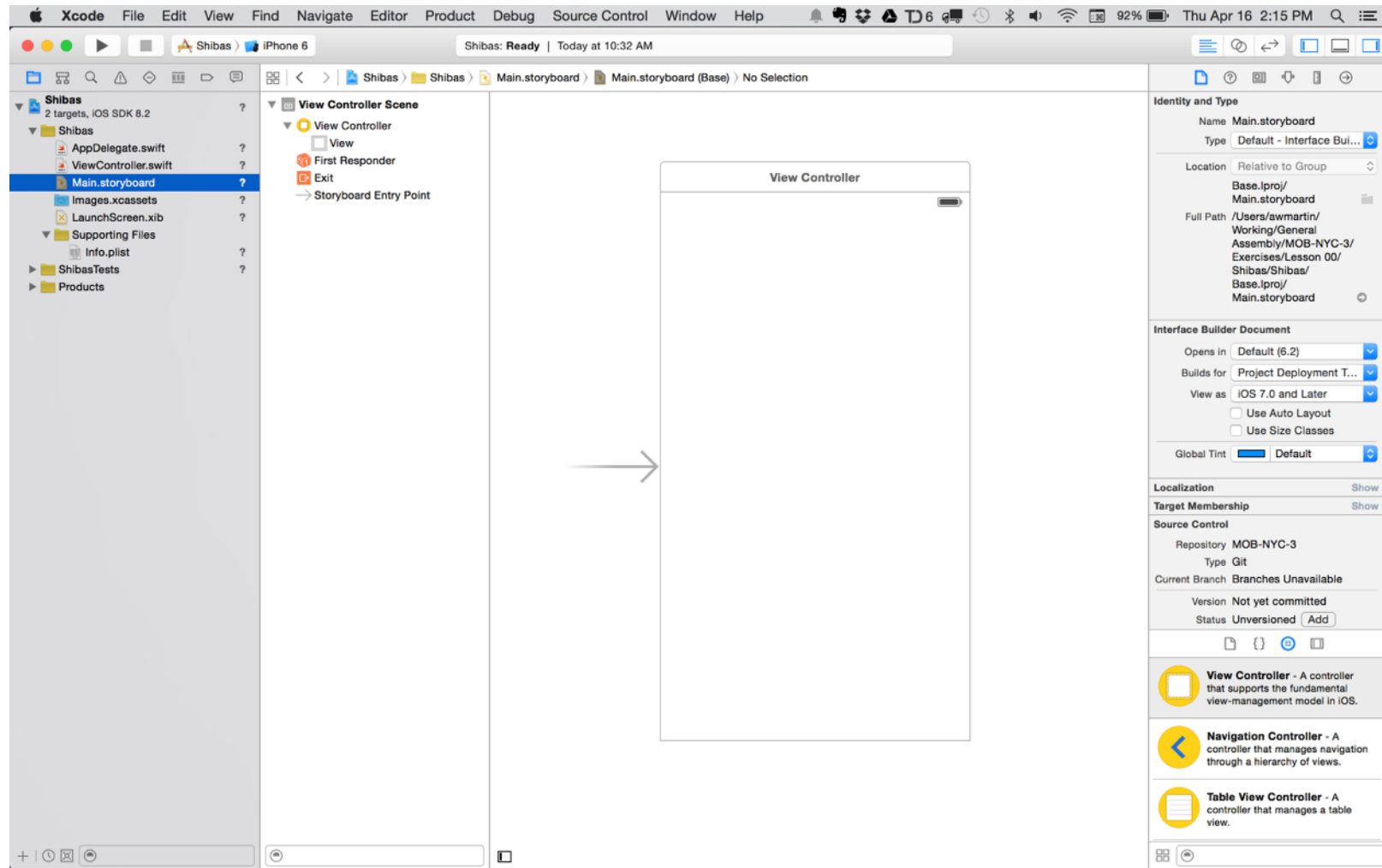


- .swift  
Swift source code file
- .storyboard  
an Interface Builder “storyboard” file
- .xib  
an Interface Builder “NIB” file
- .plist  
a “property list”

# REVIEW: IB + VIEWS

## REVIEW: IB + VIEWS

# INTERFACE BUILDER



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## REVIEW: IB + VIEWS

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# GETTING VIEWS ON SCREEN

- To start understanding iOS apps, we'll first tackle 'views' on the screen
- Almost everything we see on screen is a **view**.
- There are lots of kinds of views:
  - Buttons, labels, tables, images, etc

**REVIEW: IB + VIEWS**

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# VIEWS ON THE WHITEBOARD

**LOGISTICS: HOMEWORK**

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# **GIT/GITHUB, HOMEWORK, SUBMISSION**

**REVIEW: IB + VIEWS**

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# COLLABORATION SOFTWARE

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## LOGISTICS: HOMEWORK

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# GITHUB

- A social network for sharing and collaborating on code
- What we'll use to get slides, submit homework, post resources, collaborate on the final project
- Free, as long as what you post is public



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## LOGISTICS: HOMEWORK

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# GIT

- The ‘pipes’ that power github.
- Many developers use the command line, though we’ll use an app.
- A general-purpose ‘version control’ tool that lets us:
  - Back up
  - Revert
  - Collaborate
  - ...our code

**LOGISTICS: HOMEWORK**

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# **GITHUB WALKTHROUGH**

**[HTTP://GITHUB.COM/GA-STUDENTS/MOB-NYC-3](http://github.com/ga-students/mob-nyc-3)**

## LOGISTICS: HOMEWORK

# GIT WORKFLOW

- Git manages changes in a project between many different collaborators.
- It helps everyone manage and contribute to code that could be constantly changing.

Github



Collaborator 1.



Collaborator 2.



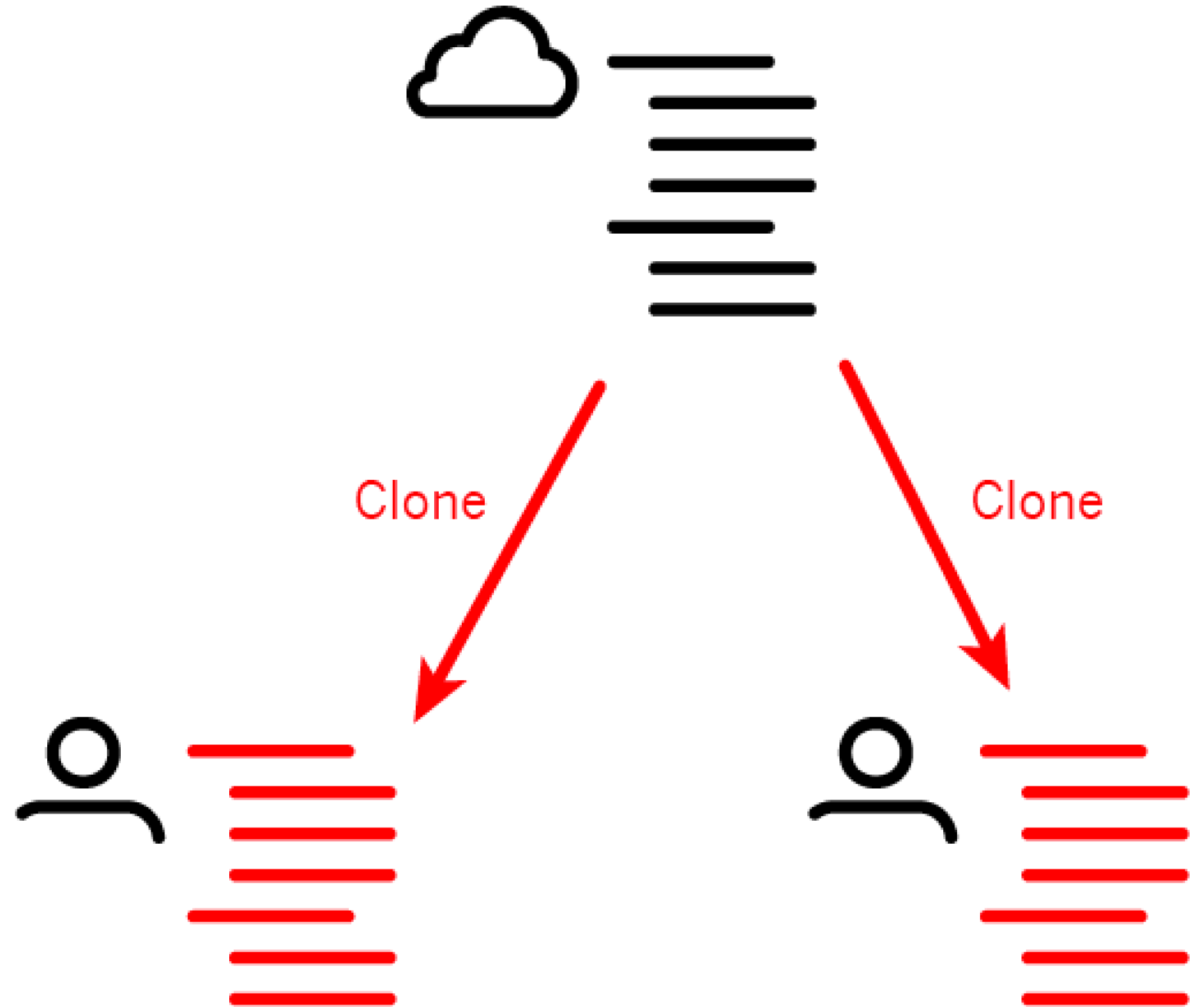
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## LOGISTICS: HOMEWORK

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# GIT WORKFLOW

- So the way git works is that everyone has a copy of the repository on their own computer, and a “remote” copy on the server (in the “cloud”).
- That initial step to get the “remote” copy is called “clone.”



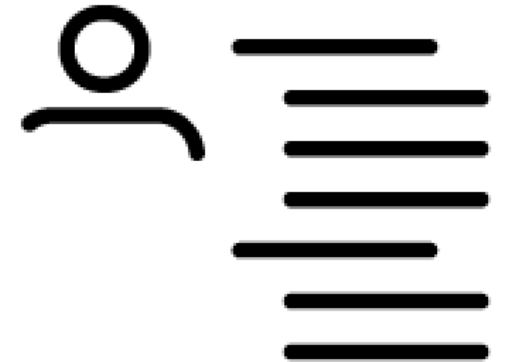
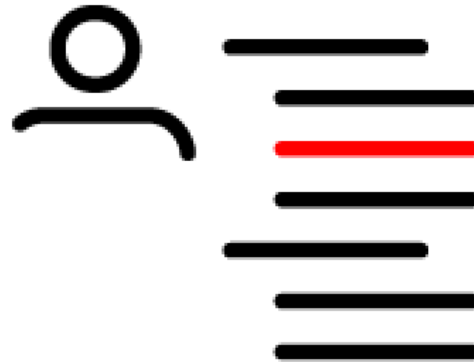
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## LOGISTICS: HOMEWORK

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# GIT WORKFLOW

- When someone changes a file (the red line represents a file that's changed), the problem is how to update everyone else on the team with that change.



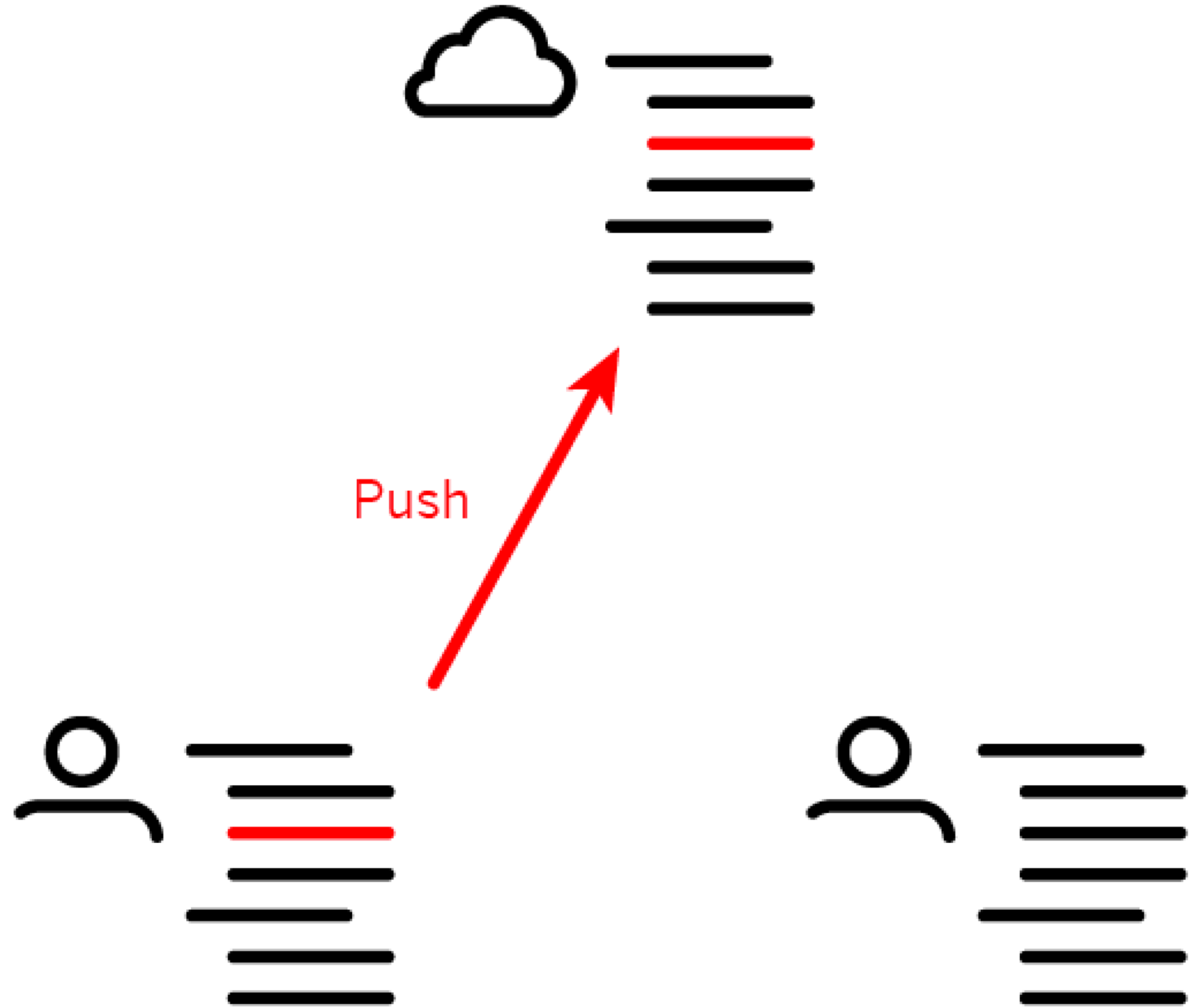
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## LOGISTICS: HOMEWORK

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# GIT WORKFLOW

- › All the changes are centralized through the remote copy of the repo.
- › To send that change to the repository, so it “knows” about it, we use a command called “push.”
- › We often say “push your changes” to refer to this process.



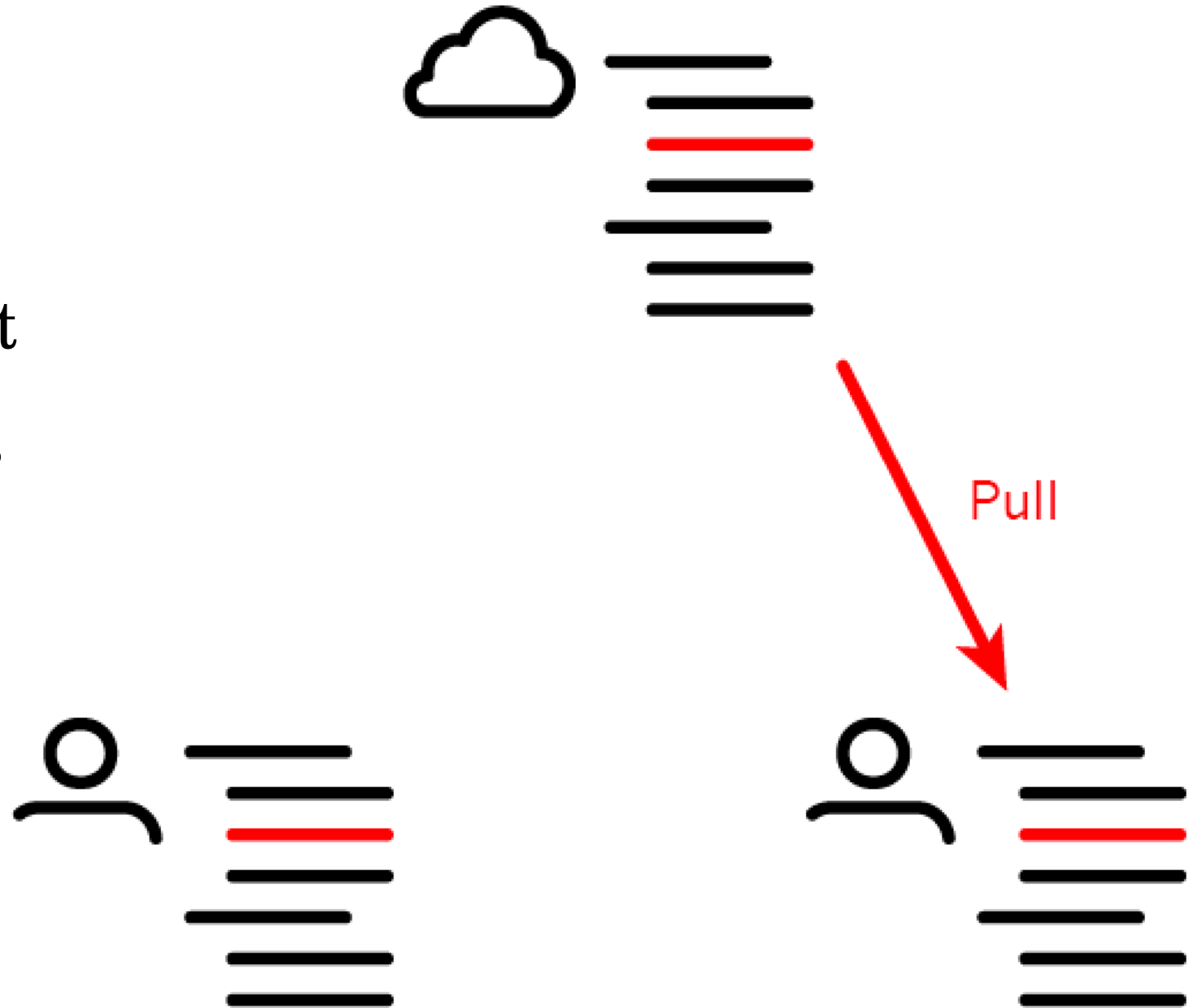
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## LOGISTICS: HOMEWORK

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# GIT WORKFLOW

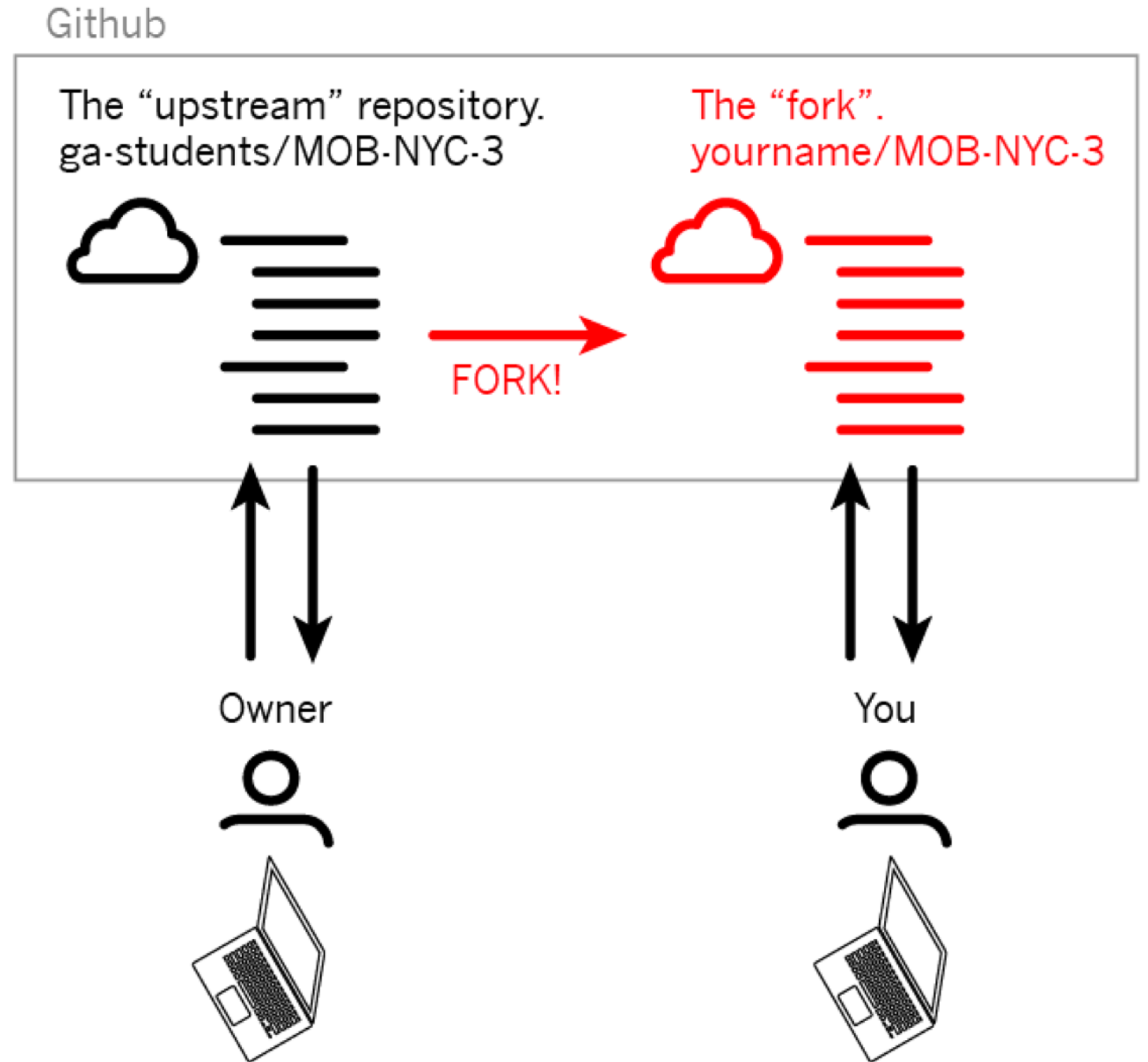
- To retrieve any changes that others have made to the remote repository, we “pull” those changes down.
- This actually represents a complex process of “fetching” those changes, and “merging” them into your copy of the code.



## LOGISTICS: HOMEWORK

# GITHUB WORKFLOW

- To work in Github, we'll be “forking” the main repository to create our own copies of it.
- This will enable you to submit homework without interfering with other students' work.





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**GETTING STARTED**

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**Q&A**