**Welcome to Day #2 of CGCC!**

Every day we will have a GitHub repository page that outlines each day and the activities that we will complete. We will also provide all homework on these pages.

Feel free to browse the other days to see what is coming up!

As always, let us know if you need any help or have any questions.

*Link to Camp GitHub*: <https://github.com/paigerodeghero/ClemsonGameCodingCamp/tree/master/2021>

**Links for Camp Day #2**:

* GoDot Engine
  + <https://godotengine.org/>
* GitHub Overview Video
  + TODO; grab from below
* GitHub Classroom
  + Any GitHub stuff you show/need here TODO

**Optional Resources**:

* What is open source software (OSS)?
  + <https://www.youtube.com/watch?v=a8fHgx9mE5U>
* Tutorials:

**Day 2: GitHub, Godot, and creating first game**

**SCHEDULE**:

* Homework review
* Meeting your team
* GitHub Classroom setup
* GitHub introduction
* “FlappyBird” story
* Godot game engine
* Making “FlappyBird”
* Homework: Make one change to “FlappyBird” and commit to GitHub

**ACTIVITY**: Homework Review (20 minutes)

Homework Review:

* Each student presents their findings from the game they choose to play
* Discuss the following game elements from the game
  + Goal
  + Story
  + Rules
  + Players
  + Player interactions

**ACTIVITY**: Meeting your team (30 min)

* Students are introduced to their virtual workspace
* Activity: Meeting your team.
  + Introductory Interview with Project Partner
    - Name
    - Which grade are you in?
    - What is your background with computers? What skills do you have?
    - What do you find most interesting about computers and how does this impact your college plans?
    - How do you manage your time when you get busy with a lot of tasks?
    - Have you worked on a team project before? If yes,
    - How often did your team meet together?
    - Did your team have a leader? What did that leader do?
    - What was your role on the team?
    - How well did you get along with your teammates related to work, or related to non-work?
    - Who are the other members of your family? Do you live with them?
    - What are your hobbies/interests/passions that are not related to this class?
    - Do you have any unique skills/tricks that you can show me now?
    - Who is your favorite teacher in high school? What do they teach? Why are they your favorite?
    - What was the last non-software-related book you read and describe what it was about in 2 sentences.
    - What is the best movie you saw in 2020, and why was it your favorite?
    - Do you have a personal hero in your life? Who is it and why are they your hero?
    - What is your phone number? For backup purposes in case technology doesn't work.
    - When can you work on the project outside of class?
    - Negotiate mutually exclusive times to edit code
    - What kind of programming experiences have you had in the last 3 years?
    - Tell me about a trip you took that was far away from where you live?

**ACTIVITY**: GitHub Classroom setup (20 min)

* Add from last year’s camp (make sure instructions are up to date)

**INSTRUCTION**: GitHub Introduction (15 min)

* GitHub intro
  + What is GitHub?
    - <https://www.youtube.com/watch?v=w3jLJU7DT5E&t=30s> (check)
  + Commit
  + Pull
  + Push
  + Merge

**INSTRUCTION**: Creating a game: Story (10 min)

Who is Faby?

* Discuss the story of flappy bird
* What is the goal?
  + To go through as many obstacles as possible
* How can we make the game more interesting?
  + Add enemies in the game

**ACTIVITY**:How to make FlappyBird more interesting? (5 min)

* Students share their ideas to make FlappyBird more interesting

**INSTRUCTION**: INTRO GODOT: (game engines in general) (5 min)

* What is a game engine?
  + TODO
* What is godot?
  + TODO
* Games made in godot
  + Go over a few and/or show TODO

15 min break

Create “FlappyBird” in godot [1 hour activity][see one – do one – show one]

* Create FlappyBird project in godot.
  + Open godot.
  + Create an empty project.
  + Create a new scene.
* Configure and save the game.
  + Make changes to window setting to suit mobile games.
    - Set orientation to portrait.
    - Set stretch mode to 2D.
    - Set aspect to keep.
  + Make following changes to quality settings.
    - Enable ‘use pixel snap’.
    - Enable ‘emulate touch for mouse’.
  + Make sure the game is saved prediodically.
* Create “FlappyBird” sprite.
  + Drag and drop the assets into godot.
  + Make any necessary changes in import tab.

15 min break

* Make “FlappyBird” move [30 min activity] [see one – do one – show one]
  + Write a script to make “FlappyBird” move with input.
  + Break in down into at least 2 chunks.

**HOMEWORK**:

* Complete all steps shown today
* Make one change to “FlappyBird”
* Commit homework to GitHub