**Welcome to Day #1 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>

**Day 1: Introduction to the CGCC Camp, Logistics, and Games**

**SCHEDULE:**

* Instructors start the video call
  + Make sure to make all TAs co-hosts.
* Go over video and recording and start recording
* Campers can turn video and audio on or off at any time
* Introduction to Clemson Game Coding Camp (CGCC)
* CGCC Team Introductions (Name, location, expertise, and a hobby)
* Campers introduce themselves (Name, location, and a hobby)
  + Go in order alphabetical order by first name by Zoom account
* Go over journaling during the camp:
  + TBD
* Go over general camp agenda, learning goals, and communication goals
  + Powerpoint slide deck TBD
  + Whole camp is being recorded.
  + Anytime they’re in a breakout room, we turn on recording. TAs will upload recordings after each day’s class to Google Drive.
* Go over how to best ask for help
* Go over research study
  + Consent form: TBD
* Teacher backchannel is in the Teams chat: CGCC Weekly
* Introduce screensharing and have each camper test out screensharing
* Logistics for communication and attendance
  + Email cgcc if you can’t make it to class.
  + Take attendance.
* Double check that everyone has the correct software installed and help those that may have any issues
  + GoDot Engine
  + VS Code
  + VS Code LiveShare extension
  + VS Code GoDot-Tools extension
  + Get a Git account
  + Github Desktop / SourceTree
* Ask if anyone has any questions before moving forward

**INSTRUCTION**: What is a game? (approximately 5 minutes) (Paige will project)

High level definition of a game: type of play activity with rules and conflict

Go over an example of a game (“Tic-Tac-Toe”) with rules and conflicts.

*Link:*<https://gametable.org/games/tic-tac-toe/>

Fun fact: “Tic-Tac-Toe” boards can be traced back to ancient Egypt and there are actually many different variations of the game.

*Goal*: To win by getting three O’s or X’s in a row, column, or diagonal.

*Conflict*: Blocking and forking

*Blocking*-When an opponent has two in a row, the player needs to play their piece as the third in a row to block them from winning.

*Fork*-When a player creates an opportunity for themselves where they have two ways to win. The player has 2 in a row twice on the board.

**GROWTH MINDSET:** Introduce the Growth Mindset (45 minutes)

Instructions for Growth Mindset

* **Videos:** <https://www.khanacademy.org/college-careers-more/learnstorm-growth-mindset-activities-us/high-school-activities>
  + Go through
    - The Truth about your brain
    - The growth mindset
    - Mistakes are opportunities
    - Keep going. Keep growing.
* Explain how growth mindset works in our camp.

**~~INSTRUCTION~~**~~: Instructors introduce the game “CodeNames” (approximately 15 minutes)~~

*~~Link~~*~~:~~ [~~https://codenames.game/~~](https://codenames.game/)

**~~ACTIVITY~~**~~: full camp activity (approximately 30 minutes)~~

~~Have students play “CodeNames” with instructors~~

**INSTRUCTION**: Examples of games (approximately 5 minutes)

* “Minesweeper” (*Link*: <https://minesweeperonline.com/>)
* “Space Invaders” 0:30-1:00 (*Link*: <https://www.youtube.com/watch?v=MU4psw3ccUI>)
* “Pac-Man” (*Link*: <https://www.google.com/logos/2010/pacman10-i.html>)
* “Super Onion Boy” (*Link*: [www.crazygames.com/game/super-onion-boy](http://www.crazygames.com/game/super-onion-boy))
* “Matchimals” (*Link*: <https://www.matchimals.fun/>)

**INSTRUCTION**: Types of games (approximately 18 minutes) (Paige)

* Solitaire: “Minesweeper”
* Head to head: “Tic-Tac-Toe”, “Matchimals”
* Player vs. System: “World of Warcraft”
* One against Many: “Clue”
* Free for all: “Monopoly”
* Team competition: “Dodgeball”

**ACTIVITY**: **Solo and think-team-share** (approximately 15 minutes) (Paige)

(Makayla, please create Zoom breakout rooms with a manually-implemented random assignment of pairs of students per room, one TA per breakout, but not Paige). Breakout rooms: automatic return with no wait time. Store the assignments in a Google Doc.

Classify two games as a pair

* (1) Write down your answers and keep it to yourself (1 min)
  + What kind of game is “Space Invaders”? (5 min)
    - *Link*: <https://www.youtube.com/watch?v=MU4psw3ccUI> (00:30-1:00)
  + What kind of game is “Pac-Man”?
* (2) Campers and TAs go into breakout rooms. TA turns on recording. Tell them to introduce themselves to one another by name and city where you live. Person with the name that earlier in the alphabet goes first. Says what they think the answer is. Second person goes. Discuss if you disagree. Come to agreement on what you believe the right answer is.
* (3) Come back out of the breakout room when you’re done (show them how to get out of a breakout room) or breakout rooms will close automatically after 5 minutes.
* (4) We will pick on one team to share their answers.

15 MINUTE BREAK

(James will display a 15-minute countdown timer and present his screen).

**ACTIVITY:** Think-Team-Share (approximately 20 minutes)

List computer games you have played. We’ll classify them together.

* (1) Individually, write down a list of four games that you have played.
  + Display a list of the classifications of games
    - Solitaire: “Minesweeper”
    - Head to head: “Tic-Tac-Toe”, “Matchimals”
    - Player vs. System: “World of Warcraft”
    - One against Many: “Clue”
    - Free for all: “Monopoly”
    - Team competition: “Dodgeball”
* (2) Send campers to breakout rooms.
  + Explain each game’s synopsis. One partner goes through their list at a time, alternating back and forth after each individual game.
  + Partner classifies the games. If you disagree, what else could you add to your description of the game to have gotten your partner to understand the game type?
  + Campers come back to main room when finished (or when called back at specific given time).
* (3) Each partner takes the first game from their partner’s list and shares the name, a summary of the game, and classifies it. We go in order of the first three students’ first names.

**INSTRUCTION**: Game Elements (approximately 11 minutes)

Goals: (show screenshots of each) (6 min)

* Capture/destroy: “Chess” (*Link*: <https://betacssjs.chesscomfiles.com/bundles/web/images/offline-play/standardboard.png>)
* Territorial control: “Risk” (*Link*: <https://upload.wikimedia.org/wikipedia/commons/8/8c/Amsterdam_-_Risk_players_-_1136_%28cropped%29.jpg>)
* Collect: “Pac-Man” (*Link*: [https://miro.medium.com/max/2496/1\*hCdywjP\_Sg1zTyc\_BbbpSg.png](https://miro.medium.com/max/2496/1*hCdywjP_Sg1zTyc_BbbpSg.png))
* Solve: “Clue” (*Link*: <https://images.heb.com/is/image/HEBGrocery/001669724>)
* Chase/race/escape: “Mario Kart” (*Link*: <https://cdn57.androidauthority.net/wp-content/uploads/2019/09/AAW-Mario-Kart-Tour-1198x675.jpg>)
* Spatial alignment: “Tetris” (*Link*: <https://s3.amazonaws.com/tetris-www/assets/article/2017/06/16/how-to-get-better-at-tetris_feature.jpg>)
* Build: “Minecraft” (*Link*: <https://compass-ssl.xbox.com/assets/a7/74/a77438db-e4f8-4d30-92b4-5b26f246219f.jpg?n=Minecraft_Sneaky-Slider-1084_Aquatic_1600x675.jpg>)

Rules: Go over the rules of “Pac-Man” as an example (5 mins)

*Link*: <https://www.google.com/logos/2010/pacman10-i.html>

* Gameplay
* Length of play
* Scoring
* Turn-taking

**ACTIVITY:** Solo and think-share (approximately 20 minutes)

Solo (10 minutes):

* Remind students where their journals are via email or DM. Do not share journal links with other students.
* Write a paragraph on your favorite game’s rules in your journal. Pick one rule to change and tell us how the gameplay will change.
  + Write the name of the game
  + Write 1 sentence summary of game
  + Write the goal of the game
  + Write what type of game it is
  + Write and list the 3 most important rules of the game
  + Choose 1 rule to change. Change it and describe the impact to gameplay. Write this down

Think-Share (10 minutes):

* Campers can volunteer to share their favorite games’ rules.
  + If no one volunteers, we will go in reverse alphabetical order by first name

10 MINUTE BREAK

(James will display a 10-minute countdown timer and present his screen).

**INSTRUCTION**: Game Elements Continued… (approximately 20 minutes)

* Players
* Intention/Motivation
* Relationship to other players
* Player/enemy
* Characters (“Super Mario Bros.” example)
  + Mario: Plumber
    - *Link*: <https://cdn.vox-cdn.com/thumbor/Yt1avchDkHqEqJuhYZ3YjKF3kFc=/0x0:1700x960/1200x675/filters:focal(714x344:986x616)/cdn.vox-cdn.com/uploads/chorus_image/image/57514059/mario.0.jpg>
  + Luigi: Mario’s brother, his sidekick, also a plumber
    - *Link*: <https://upload.wikimedia.org/wikipedia/en/7/73/Luigi_NSMBUDX.png>
  + Goomba (Mushrooms): They walk around and kill Mario if he touches them. He can jump on them to kill them.
    - *Link*: <https://upload.wikimedia.org/wikipedia/en/c/ce/Goomba.PNG>
  + Koopa Troopas: Birds turned into turtles. They want to kill Mario.
    - *Link*: <https://upload.wikimedia.org/wikipedia/en/b/b2/Koopa_Troopa_NSMBU.png>
  + Princess Toadstool: Ruler of the mushroom kingdom, the goal is to rescue her
    - *Link*: <https://upload.wikimedia.org/wikipedia/en/thumb/d/d5/Peach_%28Super_Mario_3D_World%29.png/220px-Peach_%28Super_Mario_3D_World%29.png>
  + Toad: Protects Princess Toadstool
    - *Link*: <https://upload.wikimedia.org/wikipedia/en/d/d1/Toad_3D_Land.png>
  + Bowser (King Koopa). A dragon who kidnapped Princess Toadstool and is guarding her. Defeat him to win the game.
    - *Link*: https://mario.wiki.gallery/images/7/7d/MSOGT\_Bowser.png
* Player Interaction
  + Player/player
  + Player/computer
* Art /Music
  + Show difference in art.
    - “Super Mario” vs. “Super Mario 64”
    - Show clipart for each character for both games and show them side by side.
      * “Super Mario” (*Link*: <https://www.mariowiki.com/Gallery:Super_Mario_Bros>.)
      * “Super Mario 64” (*Link*: <https://www.mariowiki.com/Gallery:Super_Mario_64>)
* Story
* Essential Conflict

**ACTIVITY:** Think-Share (approximately 13 minutes)

Solo (3 minutes):

* Pick a character from a game of choice
* Find an image of the character ready to share with the camp.
* Remind students where their journals are. Write down the URL in your journal.
* Write down one distinctive part of the character’s graphical costume.

Share (10 minutes:

* Campers will share their character’s image via sharing the URL/screenshare one at a time. We will go in alphabetical order by first name.

**INSTRUCTION**: Instructors play “Minesweeper” and narrate the story (approximately 5 minutes)

* “Minesweeper” (*Link*: <https://minesweeperonline.com/>)
* Show off elements of the game that support the story. (E.g., colors of numbers selected)

**ACTIVITY:** Team-Share (approximately 20 minutes)

Pick an existing game, play it and narrate the story.

* Campers join a breakout room with one partner
* Campers pick a game and narrate it to their partner
* Show off elements of the game that support the story
  + Remind students where their journals are.
  + Both partners should write down the game and the elements in their own journals.
* Campers come back to main room and volunteers can share their game and narration. If no one volunteers, we go in reverse alphabetical order.

**INSTRUCTION**: Ask if there are any final questions for the day before introducing homework

**HOMEWORK:** Play a game and describe to us

* Pick any computer game you like and play it for 30 minutes
* Be prepared to talk about the game on Day 2
  1. Be ready to demo the game via screen sharing
  2. Explain why you like the game
  3. Write out the game elements in your journal
     + Goal
     + Story
     + Rules
     + Players
     + Player interactions
* Download and install software (instructions in journal)