

Welcome to the 2020 Clemson Game Coding Camp (CGCC)! We are excited to meet you and to build some fun games over the next 13 days. Below you will find an outline for each day of the camp. We may take breaks throughout the day if we need to. Make sure you have some snacks and a drink with you during the camp. We are looking forward to seeing you tomorrow!

On July 31st, we will have each team present the game that they designed and implemented. Please invite your friends and family! We will provide you with a Zoom link to share on July 30th. The presentations will happen from 2pm- 3:30pm EDT.

-The CGCC Teaching Team (Paige Rodeghero, Andrew Begel, James Dominic, Conner Phillis, & Thomas Beeson)

Clemson Game Coding Camp Daily Overview (1pm-4:30pm EDT):

Wednesday, July 15, 2020

Day 1 – Introductions, Logistics, Camp Overview, & Game Design Introduction

- Introduction and Logistics
- What is a game? Mini lesson
- Tic-tac-toe demonstration & activity
- Examples of different games
- Partner/team assigned
- Classifying games partner/team activity & mini lesson
- Games that we play partner/team activity
- Game elements overview
- Your favorite games solo activity
- Game components mini lesson
- Game narrative partner/team activity
- Homework overview and assignment
- End of day survey

Thursday, July 16, 2020

Day 2 – Building Pacman & Paper Prototyping

- Homework review
- Review what a story in a game is
- Introduction to Makecode
- Building Pacman
- Paper prototyping
- Homework overview and assignment
- End of day survey

Friday, July 17, 2020

Day 3 – BrainPad, Pacman Ghosts, AI, & Guest talk by Peli de Halleux (Microsoft MakeCode team)

- Homework review
- Introduction to the BrainPad game hardware (received in the mail two weeks ago)
- Developing and implementing Pacman ghosts into game
- Guest talk by Peli from Microsoft and the MakeCode team
- Creating improved AI for ghosts and restoring balance to game lesson
- Homework overview and assignment
- End of day survey

Monday, July 20, 2020

Day 4 – GitHub, Start Screen, and Second Game

- Homework review
- Introduction to GitHub, interview your partner/team, setting up the virtual classroom
- Mini lesson on saving GitHub project
- Drawing a maze with tile map activity
- Mini-lesson on start screens, game over screens, and instructions
- MakeCode Arcade game dissection by instructors
- Mini lesson on acceleration
- MakeCode Arcade game dissection activity
- Homework overview and assignment
- End of day survey

Tuesday, July 21, 2020

Day 5 – Brainstorm New Games and Begin Project to Develop Our Own Small Game

- Homework review
- Brainstorming lesson
- Brainstorming partner/team activity
- Mini lesson on game rules
- Brainstorming activity. Instructors must build a game based on student requirements
- Discuss partner /team communication mini lesson
- Design and Develop Your Own Game with a Partner – 2 day mini-project
- Brainstorming activity
- Introduction to Scrum
- End of day survey

Wednesday, July 22, 2020

Day 6 – Work Day & Small Game Presentations

- Homework overview and assignment
- Scrum sessions to work on game with partner/team
- Students will present their game and follow a scaffold of questions
- End of day survey

Thursday, July 23, 2020

Day 7 – Game Testing & Brainstorm New Game and Begin Project to Develop Our Own Large Game

- Homework review
- Game testing overview
- Usability testing partner/team activity
- Game testing overview continued
- User testing activity
- Artificial Intelligence (AI) mini lesson
- Design and Develop Your Own Game with a Partner – 6-day project
- Time to work on game with partner/team
- Homework overview and assignment
- End of day survey

Friday, July 24, 2020

Day 8 – 3D Modeling & Work Day

- Homework review
- Scrum with partner/team
- 3D modeling introduction
- Maya introduction
- Time to work on game with partner/team
- End of day survey

Monday, July 27, 2020

Day 9 – Unity & Work Day

- Scrum with partner/team
- 3D modeling introduction
- Maya introduction
- Time to work on game with partner/team

- End of day survey

Tuesday, July 28, 2020

Day 10 – Guest talk by Richard Knoll (Microsoft MakeCode team), Game Networking, & Work Day

- Scrum with partner/team
- Guest talk by Richard Knoll
- Game networking lesson
- Time to work on game with partner/team
- End of day survey

Wednesday, July 29, 2020

Day 11 – Piracy, Ethics, & Work Day

- Scrum with partner/team
- Lesson on Software Piracy with mini activities throughout
- Computer Ethics mini lesson
- Computer Ethics case study activity
- Time to work on game with partner/team
- End of day survey

Thursday, July 30, 2020

Day 12 – Work Day & Final Presentation Practice

- Scrum with partner/team
- Time to work on game with partner/team
- Practice presentations with the instructors
- End of day survey

Friday, July 31, 2020

Day 13 – Final Day Presentations (Short Day)

- Presentations to Family and Friends (2pm – 3:30pm EDT)
- End of camp survey
- Wrap up discussions with students and instructors