Course Intro

Welcome to Bootcamp



Course Expectations



Be Present

- Soak up the information.
- Do the work.
- Have a growth mindset.



Support Each Other

- Pair programming is important.
- Exercises, projects, and labs may require pairing.
- There are multiple group projects.



Write Code

- There's only one way to learn how to code: writing code.
- Watching videos, reading articles, reading documentation, and talking about code are all tools, but in the end, you need to put in the hours and write the code.

Practice

- Practice, practice, practice.
- If you complete a lab, try tweaking it or dive into extended challenges. You can always add more features and creativity to labs and exercise.
- Have an idea? Try it. We're happy to help!
- The more code you write, the better off you are.



Most days include lecture and activities to introduce a new topic or review.

There are practical exercises every day.



Practical Work

Two categories divide the practical work.

- Exercises are short & focused on practicing a specific topic or technique.
- Labs are broader in scope and incorporate more of the material.

Labs are expected to be turned in on time. Turn in what you have, even if you don't complete it.

- Unit 2 Fundamental C#: Learn the basics of C# as well as git/GitHub.
- Unit 3 Collections and Exceptions: Create data structures that can hold multiple items. Write code that handles error conditions.
- Unit 4 OOP: Start learning Object Oriented Programming!



- Unit 5 Advanced OOP and TDD: Take your OOP skills to the next level and add in Test-Driven Development.
- Unit 6 SQL and Entity Framework: Learn the tools and techniques to store data in database systems.
- Unit 7 MVC & APIs: Start creating web apps and provide the apps with data.

your applications.

Unit 8 - JavaScript, TypeScript, Angular:
These are the browser programming languages you'll use for the "front end" of

• Unit 9 - Full Stack Angular: Pull everything together and build entire web applications.

• **Final Project**: Two weeks to work with your team and design and create an amazing full-stack application with C#, Angular, and SQL Server.



Soft Skills

Soft skills are an essential part of being successful in engineering. (And landing that first job!!!)

This is just as much a part of your Grand Circus bootcamp as the technical side!



Assessments

Assessments are our way to check in with all of you.

There are eight assessments in total, one at the end of each unit.



Assessments

Each Assessment will be 90 minutes.

Any student may request Extended Time on any assessment. To receive an additional 30 minutes, send your request in an email addressed to your instructor, TA, and Program Manager BEFORE the day of an assessment.

Projects

Throughout the class, students have three major group projects.

- 1. The first is a C# project.
- 2. The second is a small Angular project.
- 3. The third is a two-week group project that provides a centerpiece for your portfolio.



Advanced Self-Study

We can't cover every topic in a fast-paced bootcamp. If you find yourself with extra capacity, the Advanced Topics link at the top of the LMS has some valuable suggestions.





You are expected to be logged in at the exact class start time (or earlier), ready to start.

Make sure to handle your drinks, snacks, and other biological needs in advance if possible or during official breaks.



Grand Circus heavily enforces timeliness.

If someone does not complete/turn in their labs, projects, and soft skills material by the deadline, they do not receive any credit or feedback.

Labs are due at the start of class the following day unless otherwise noted.



It is uncomfortable not knowing how to solve problems.



Developers are problem solvers.

Developers solve problems by writing code.

If a developer comes across something they are not sure about, they research until they find a working solution.

Stumped on Questions?

- 1. Review class examples and documents
- 2. Instructor and/or TA
- 3. Ask a classmate
- 4. Google, StackOverflow, or even Github
- 5. Still stumped? Ask an instructor or TA

NEVER place code in your programs you do not understand!

Don't waste hours trying to fix a bug without any progress.

If you are genuinely stuck, ask a classmate, TA, or instructor for help.



Learning how to work through errors and problems is an essential skill.

Instructional staff will strategically step back from helping you at times in order to make sure you have space to practice using other tools to solve problems.

Slack

At Grand Circus, Slack is our primary means of communication outside of the classroom.

We strongly encourage you to have Slack open during class hours.



Communication

When you need to communicate with us you can do it through Slack or email.

If you choose Slack, make sure the message recipients are your instructor(s) and any TA, not just one of them.

If you choose to email, please email the instructor(s) and TA.

Setup

- 1. Installations
- 2. IDE
- 3. Project Directories



Checklist

You should already have these installed and set up:

- Google Chrome (or Firefox)
- Slack
- GitHub / git
- <u>Visual Studio 2022</u> (Free Community Edition unless you purchased a paid edition.)

