Code Louisville C#/.Net Syllabus - January 2018

Summary of Requirements for Completion of Code Louisville

The following is a list of the requirements for successfully completing Code Louisville. If any of the items are not completed, you will not be considered a graduate of this course. Please be sure to ask any questions of Code Louisville staff if you have any concerns about completing the requirements.

- 1. Complete all Treehouse courses listed in each week below. This includes completing all quizzes and challenges, and earning all badges that Treehouse awards for completion. You will be added to the Code Lou .Net Jan 2018 track in Treehouse which should contain all required courses for you to follow along with, or you can click the links in the document below to go directly to the courses. If you do not see the course added in Treehouse, please contact a staff member to be added. You are strongly encouraged to complete the Treehouse courses by your meetup day, as the topics covered may be discussed by your mentors. This may require starting the curriculum earlier than it is assigned.
- 2. Complete your personal project. This project must be completed by Friday, March 30th at noon and must fulfill every requirement listed in the Project Requirements document. The requirements and other Code Louisville information can be found on the <u>Student Resources Wiki</u>. You should show your project to a mentor well before the due date to ensure requirements are properly met. A survey link will be sent out via Slack in the last week or two of class. You will 'turn-in' your project by completing the survey and providing your GitHub link.
- 3. Attend a minimum of 2 tech events with groups around town. Check <u>LouisvilleTech.org</u> for a list of eligible events or check with Code Louisville staff if another even you're interested in isn't listed. After completing the event, message @shannonsiders on Slack or email her and state which networking event you attended and give a brief description of something you learned, someone you met, your overall thoughts, or something else you'd like to share.
- 4. Attend your weekly meetups. You are highly encouraged to attend every single week, but **more than 3 absences** will result in being removed from the program. Additionally, you must stay for at least 1 hour, 30 minutes of class for attendance to be counted. If you have a need to leave early or arrive late, please let staff know. Otherwise, leaving early may result in an absence being counted against you.

Week 0: Monday, Jan 1 - Sunday, Jan 7

No in-person meetups yet but use this time to get prepared!

Treehouse:

- ★ New courses aren't officially assigned yet, but refresh yourself on any of the below topics you you may need a refresher on. This course will assume familiarity with all of the below. All of these should have been completed during the Front-end Web Development course:
 - o Introduction to HTML and CSS
 - Console Foundations
 - Git Basics
 - GitHub Basics
- ★ Try and get started with Week 1 videos below. The topics may be brought up in discussion on the first week of class.

Visual Studio:

- ★ Visual Studio Community is a free tool used by most .Net developers. It can take a long time to download and install, so go ahead and get started on this in advance, as you'll need it during the first class meetup and the network may be slow or unusable if everyone is downloading it. Mac users, there are different options to doing this. There is a Mac version of Visual Studio that is now available, or you can use an emulation tool such as Bootcamp to install a Windows instance on your computer and run the Windows version. Please talk with your mentors if you have any concerns about installing Visual Studio.
 - Windows version:
 https://www.visualstudio.com/vs/community/
 - Mac version:
 https://www.visualstudio.com/vs/visual-studio-mac/

Week 1: Monday, Jan 8 - Sunday, Jan 14

Everyone should join their Slack channel, either #csharp-tue-jan-2018 or #csharp-wed-jan-2018

Assigned Treehouse Videos:

- **★** C# Basics
- **★** Introduction to Visual Studio
- **★** <u>Using GitHub with Visual Studio</u>

In-Person:

- **★** First Meetups!
 - Where: Code Louisville, 252 East Market Street, Louisville, KY 40202. Paid parking at meters (free after 6:00 p.m.!), beside Wild Eggs on Floyd Street, or <u>anywhere in yellow on this parking</u> map.
 - **When:** 6:00 8:00 p.m.
 - What to bring: laptop, questions
 - What we'll do: Introductions and the mentors will help everyone get their environments set up

Week 2: Monday, Jan 15 - Sunday, Jan 21

Assigned Treehouse Videos:

- **★** C# Objects
- **★** Debugging in Visual Studio

Week 3: Monday, Jan 22 - Sunday, Jan 28

Assigned Treehouse Videos:

- **★ HTTP Basics**
- **★** C# Collections
- **★** ASP.Net MVC Basics

Project:

★ Start thinking of ideas for what you want your final project to be.

By the end of the session, you should be able to create apps that read, write, update, and delete from a database, so start thinking of something interesting to work on!

Week 4: Monday, Jan 29 - Sunday, Feb 4

Assigned Treehouse Videos:

★ ASP.NET MVC Forms

Project:

★ Continue thinking of ideas for your project. Start writing down features, ideas, or sketching it out on paper. You can even design the front-end of it so you can plug in the back-end code later.

Week 5: Monday, Feb 5 - Sunday, Feb 11

Assigned Treehouse Videos:

- **★** SQL Basics
- **★** Modifying Data with SQL
- ★ Package Management with NuGet

Project:

★ You should have your project idea by now. Continue to document features, plan out what it will look like. Use class time to talk to mentors about your idea and verify it's a good project to work on.

Networking:

★ Don't forget you have to attend TWO networking events during the 12 weeks. Check <u>louisvilletech.org</u> for a good list of options! Message @shannonsiders or email her to get credit for attending.

Week 6: Monday, Feb 12 - Sunday, Feb 18

Assigned Treehouse Videos:

★ Entity Framework Basics

Project:

★ Try and find some time to talk with a mentor about your project if you haven't already, just to verify it's appropriate size and difficulty for the course. Start your development if you haven't already! Remind yourself of the project requirements on the Student Resources Wiki!

Week 7: Monday, Feb 19 - Sunday, Feb 25

Assigned Treehouse Videos:

- **★** Creating Data Structures using C# Generics
- **★** Entity Framework Migrations

Project:

★ Keep working on your project! Make sure to commit updates to GitHub regularly! Don't forget about the <u>Student Resources</u> Wiki!

Week 8: Monday, Feb 26 - Sunday, Mar 4

Assigned Treehouse Videos:

Note: Unit Testing is required but Using Entity Framework with ASP.NET MVC is a recommended/optional course. It will not appear in the Treehouse track, so you need to search

for it or follow the below link. Completion of optional courses will not be checked for Code Louisville's graduation requirements.

- **★ Required**: <u>Unit Testing in C#</u>
- ★ Recommended: <u>Using Entity Framework with ASP.NET MVC</u>

Project:

★ Keep working on your project! Make sure to commit updates to GitHub regularly! Don't forget about the <u>Student Resources</u> Wiki!

Week 9: Monday, Mar 5 - Sunday, Mar 11

Optional/Recommended Treehouse Videos:

These videos are considered optional but highly recommended. They will not be counted for purposes of completing the Treehouse track for graduation.

- **★** Querying with LINQ
- **★** Intermediate C#
- ★ C# Streams and Data Processing

Project:

★ Your project is due in a THREE WEEKS! Keep working on your project! Make sure to commit updates to GitHub regularly! Don't forget about the <u>Student Resources Wiki!</u>

Week 10: Monday, Mar 12 - Sunday, Mar 18

Networking:

★ Don't forget you have to attend **TWO networking events** during the 12 weeks. Check <u>LouisvilleTech.org</u> for a good list of options!

Project:

- ★ Keep working on your project! Make sure to commit updates to GitHub regularly
- ★ Your projects will be your number one tool to getting a job, so make it something great!
- **★** Double check the project requirements! Ask a mentor to confirm you've got a project that meets them
 - These can be found on the Student Resources Wiki.
- ★ Remember, your projects on GitHub are your number one tool for getting a job!

Week 11: Monday, Mar 19 - Sunday, Mar 25

Treehouse:

★ No new assignments. Use this time to review any topics, do the optional videos from last week, and work on your project!

Networking:

★ Don't forget you have to attend **TWO networking events** during the 12 weeks. Check <u>louisville.io</u> for a good list of options!

Project:

★ Your project is due NEXT WEEK! Keep working on your project! Make sure to commit updates to GitHub regularly!

Week 12: Monday, Mar 26 - Friday, Mar 30

Projects:

★ Your project is due on GitHub no later than Friday, March 30th at noon and the survey/turn-in form completed!

The form will be linked via Slack at least 1 week in advance and will be disabled right at noon. You can complete the form even before you

are done with your project and continue to work on it after.

Do some final testing, preferably with another student on their machine, before finalizing your project! Make sure your solution runs on another computer or your project reviewer may not be able to get it to run!

Revisit the project requirements on the Student Resources Wiki.

Post Graduation: Job Hunt Workshops! Required if you have not completed one before!

Dates will be announced closer to the end of the session but will be offered in the weeks following graduation.

In-Person:

- **★** Workshops (Required if you have not attended one before)
 - o Where: Code Louisville space
 - When: Varying times will be offered to accommodate your schedules
 - What to bring: laptop, current digital resume, and have a LinkedIn account set up
 - What we'll do: Teach you everything we know based on techniques that actually work to support your job hunt!

In-person Reviews with Student Success Coordinator, Shannon Siders

Dates will be announced closer to the end of the session but will be offered in the weeks following graduation.

- **★** 1 on 1 Review (Optional, but highly valuable and encouraged!)
 - Where: Code I ouisville

- When: In the weeks following your job hunt seminar, you will have an option for an hour-long one-on-one meeting, with varying times offered to accommodate your schedules.
- What to bring: You will receive this information along with the registration e-mail. We will go over your resume, a sample cover letter, and LinkedIn profile.
- What we'll do: A brief review and recommendations for your job hunt materials, some interview questions, and next steps in your learning and career path.