My Summer: HTML and CSS Teacher Guide

Summary

- Coding skill level: **Advanced**
- Recommended grade level: **Grades 6+ (U.S.), Years 7+ (U.K.)**
- Time required: **40 minutes**
- Number of modules: **1 module**
- Coding Language: **HTML and CSS**

Teacher Guide Outline

Welcome!

Summer vacation has come to an end and school is in session! In this lesson, students will reminisce about their summer fun as they follow a step-by-step HTML/CSS tutorial in the Text Code Editor, where they'll create their own web page that captures the spirit of their summer adventures. Students are provided code to get started, but are encouraged to add or change the code to make it their own. By the end of this lesson, students will have combined creativity with problem-solving skills while reinforcing coding concepts and HTML/CSS syntax.

How to Prepare

This activity is designed for self-directed learning. Your role will be to help students individually and facilitate as students complete the coding activities on their own. The best way to prepare is to:

1. **Familiarize yourself with the material.** After selecting your Tynker lesson (e.g., My Summer), read through this teacher guide and complete the activity before assigning it to students. This will allow you to troubleshoot anything in advance and plan for potential questions from your students.
2. **OPTIONAL: Sign up for a teacher account.** Although an account is NOT required, creating a free teacher account will allow you to access teacher guides, answer keys, and tons of additional resources. You'll also be able to create free accounts for your students, monitor their progress, and see their projects.
3. **OPTIONAL: Create student accounts.** From your teacher account, you can easily create free student accounts for all your students. This will allow them to save their projects and progress, so they can continue coding when they get home! Again, this is not necessary to complete the My Summer lesson.

Activity

Overview

Objectives

Students will...

- Use HTML and CSS to create a web page
- Apply coding concepts to code a summer-themed project

Materials

- Computers, laptops, or Chromebooks (1 per student)

Vocabulary

- **Code:** The language that tells a computer what to do.
- **Web pages:** Digital documents shared on the web.

- **HTML:** Short for **H**yper**t**ext **M**arkup **L**anguage. It is used to create web pages using regular text.
- **CSS:** Short for **C**ascading **S**tyle **S**heets. It is used with HTML to change the appearance of web pages.
- **Heading:** A word, phrase, or sentence that's typically used at the beginning of a section and explains or gives a title to that section. In HTML, headings are defined with **h1** to **h6** tags.
- **Image:** A digital version of a picture.

U.S. Standards

- **CCSS-ELA:** RI.6.4, RI.6.7, SL.6.1, SL.7.1, SL.8.1
- **CCSS-Math:** MP.1
- **CSTA:** 2-AP-13, 2-AP-16, 2-AP-17
- **CS CA:** 6-8.AP.13, 6-8.AP.16
- **ISTE**: 1.c, 1.d, 4.d, 5.c, 5.d, 6.b

U.K. Standards

National Curriculum in England (computing):

- **Key Stage 3 (Years 7-9)**
  - Design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems
  - Create, reuse, revise and repurpose digital artefacts for a given audience, with attention to trustworthiness, design and usability
  - Understand a range of ways to use technology safely, respectfully, responsibly and securely, including protecting their online identity and privacy; recognise inappropriate content, contact and conduct, and know how to report concerns
- **Key Stage 4 (Years 10-11)**
  - Develop their capability, creativity and knowledge in computer science, digital media and information technology
  - Develop and apply their analytic, problem-solving, design, and computational thinking skills

Getting Started (10 minutes)

1. Tell students that they are going to create a My Summer web page today in Tynker's Text Code Editor using HTML and CSS.
2. Model for your students how to utilize the tutorial and Text Code Editor. For suggestions, please refer to the Help section of this lesson plan and read "What does the tutorial include?"
   - *Optional:* Play this short video (starting at 00:22 seconds) on how to create an HTML/CSS project: https://www.youtube.com/watch?v=NKUxXYJggY4

3. Give students a piece of paper and ask them to create a short list of 3-5 of their favorite things they did this summer. Did they: Learn a new sport? Travel somewhere new? Go camping? Defeat a difficult level in a game? Next, ask them to refer to their list for inspiration as they write a short paragraph (3-5 sentences) about their summer adventures.

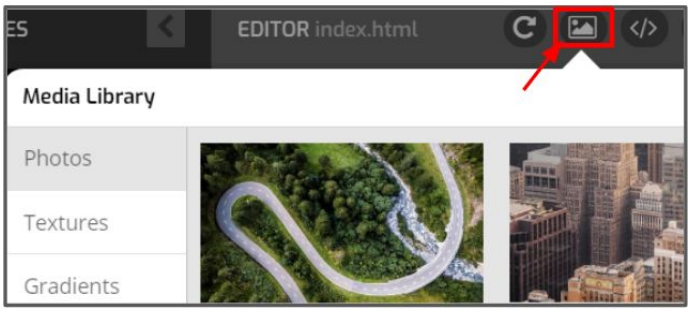
Tutorial (30 minutes)

Facilitate as students complete the My Summer tutorial on their own:

My Summer (Tutorial)

- Ask students to read through the step-by-step tutorial before they start coding.
- Activities include setting up a basic HTML document, using CSS to add images, adding text, and customizing the project.
- Point out to students that they're provided an HTML file to code their web page:

- Do students need help finding an image?
  - Ask them to click the Image button and search the Media Library:



- Ask students to type their paragraph (from the "Warm-Up" activity) inside the **<p>** tag.
- Do students need help running their program?
  - Students can run their code's output by selecting this Play button, located at the top right corner of their screen:

- Are students struggling with their code?
  - Make sure they're reading the provided tutorial instructions carefully, then ask them to compare their code with the provided "Your code should look similar to this" sections.
  - Ask students to check their syntax.
- Did students finish early? Direct their attention to the "Bonus Challenges" section of the tutorial, which provides different activities for your students to customize their project.

- To change the font of the paragraph, students can use the **font-family** option. Their code might look like this:

```
p {
  background-color:white;
  color:black;
  font-size:24px;
  font-family:cursive;
}
```

- To change the **h1** font, they'll need to add this code inside the **style** tags of their document. **Note:** Students can choose a different **font-family** such as fantasy, monospace, sans-serif, etc:

```
h1 {
  font-family:cursive;
}
```

- *Optional:* Encourage students to customize the text's background color and font color. For example, if they want a blue text background and yellow font, their code might look like this:

```
background-color:blue;
color:yellow;
```

Extended Activities

Discussion

Reflect on today's coding adventure by leading a discussion. Ask students:

- What is one piece of advice you'd give someone creating their own web page for the first time?
- What is something you'd like to add to your web page in the future?
- What did you find challenging about today's activity?
- What are some of the different ways you can customize the font? (Example: change the style and color)

Show and Tell

Encourage students to share their projects with the class:

- Use your projector to display their unique web pages. Did students complete the bonus activities? Did anyone add more than one image?

Going Beyond My Summer

If your students enjoyed My Summer, they're sure to enjoy the rest of what Tynker has to offer! Tynker offers a complete premium solution for schools to teach computer science. Over 400 hours of lessons are available to take K-8 students from block coding

to advanced text coding. We offer tons of resources for teachers, including comprehensive guides, free webinars, and a forum to connect with other educators.

Do More with Tynker

With Tynker, kids don't just acquire programming skills—they explore the world of possibilities that coding opens up. Tynker has several interest-driven learning paths that make coding fun, both inside and outside the classroom:

- **Coding and Game Design:** Your students can use Tynker Workshop, a powerful tool for crafting original programs to make games, stories, animations, and other projects. They can even share their work with other kids in the Tynker Community.
- **Drones and Robotics:** Tynker integrates with connected toys, including Parrot drones and Lego WeDo robotics kits, so kids can see their code come to life.
- **Minecraft:** Tynker integrates with Minecraft so your students can learn coding through a game they love. Tynker offers skin and texture editing, as well as a custom Mod Workshop that lets kids try their original code in Minecraft.

Tynker for Schools

Used in over 80,000 schools, our award-winning platform has flexible plans to meet your classroom, school, or district needs. All solutions include:

- Grade-specific courses that teach visual coding, JavaScript, Python, robotics and drones
- A library of NGSS and Common Core compliant STEM courses that are great for project-based learning
- Automatic assessment and mastery charts for whole schools and individual classes and students
- Easy classroom management with Google Classroom and Clever integration
- Professional training, free webinars and other teacher training resources

Need help getting Tynker started at your school? Contact us to learn more about teaching programming at your school with Tynker!

Help

Need help? Below you'll find answers to frequently asked questions about using My Summer.

How do I prepare for My Summer?

1. **Familiarize yourself with the material.** After selecting your Tynker lesson (e.g., My Summer), read through this teacher guide and complete the activity before

assigning it to students. This will allow you to troubleshoot anything in advance and plan for potential questions from your students.

2. **OPTIONAL: Sign up for a teacher account.** Although an account is NOT required, creating a free teacher account will allow you to access teacher guides, answer keys, and tons of additional resources. You'll also be able to create free accounts for your students, monitor their progress, and see their projects.
3. **OPTIONAL: Create student accounts.** From your teacher account, you can easily create free student accounts for all your students. This will allow them to save their projects and progress, so they can continue coding when they get home! Again, this is not necessary to complete the My Summer lesson.

Who is this activity for?

My Summer is intended for students in grades 6+ (U.S.) or years 7+ (U.K.) with some coding experience.

Do I need to create Tynker accounts for my students?

No, you do not need to create Tynker accounts for your students.

What devices do I need?

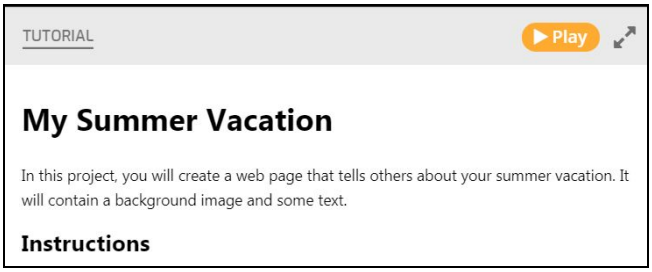
Computers, laptops, or Chromebooks (1 per student) with an internet connection

What will my students learn?

Students will combine creativity, originality, and coding concepts to create a web page. Additionally, students are encouraged to expand on their project and modify their code. In this process, students will develop debugging and logical reasoning skills.

What does the tutorial include?

The tutorial includes several features and resources to help your students get started! Here's what you will find:



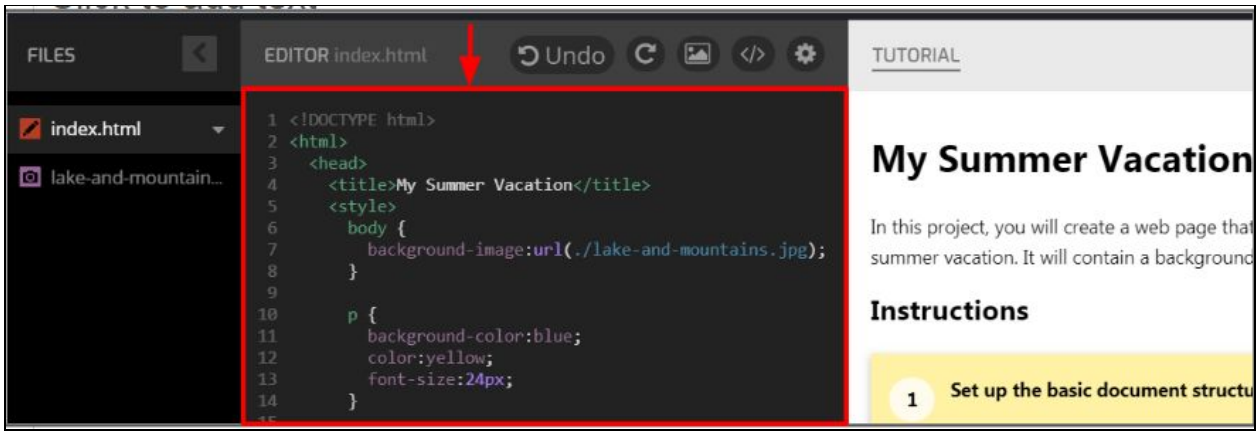
- Step-by-step directions to help your students create a My Summer web page.
- Bonus Challenges, with help to get started.

How do my students run their code?

Tell students to select the “play” button:

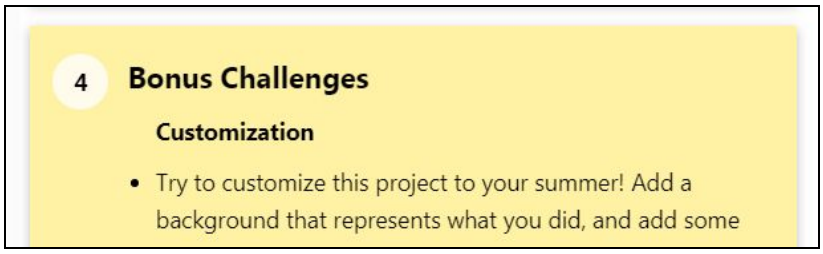
Where do my students edit their code?

This is the code editor section, where students can make changes to their code:



How do my students customize their project?

- Tell students to scroll down to the “Bonus Challenges” section of the tutorial, which includes directions to help your students make their project unique! Here’s what it looks like:



How can I help my students understand their code?

- Make sure students are reading the tutorial carefully, which describes each step of the My Summer project.
- By the end of the project, their code should look similar to this:

```
<!DOCTYPE html>
<html>
  <head>
    <title>My Summer Vacation</title>
    <style>
      body {
        background-image:url(./lake-and-mountains.jpg);
      }

      p {
        background-color:white;
        color:black;
        font-size:24px;
      }
    </style>
  </head>
  <body>
    <h1>Outdoor Adventure</h1>
    <p>Over the summer, I went camping. We hiked near some mountains.</p>
  </body>
</html>
```

Note: This is an open-ended project. Students are encouraged to expand on this example by writing their own summer-themed story, customizing the font, and adding images.

How can I contact the Tynker support team?

If you have any issues or questions, send us an email at support@tynker.com.