## Description

It's dinner time and you're faced with the million-dollar question, “What should we have for dinner?” You spend time thinking about all the delicious foods you crave. “Mmm, pizza, noodle soup, sushi…”

And then you make a decision and a suggestion, but your sibling or friend wants something else instead. What should you do now?

This is a situation many of us have encountered in this day and age of limitless choices. Fear not! In the App Development Summer Camp, students will learn how to plan, design, and code a random food picker app!

The App Development (App Dev) Summer Camp is a week-long series of virtual workshops that runs daily from 10:00-11:30 am. This **beginner-friendly workshop series** will focus on app development using [Thunkable](https://Thunkable.com), which is a drag-and-drop app builder. In this summer camp, students will attend four workshops in which they will learn how to plan their app design by creating paper prototypes and coding concepts that will help them build a random food picker mobile app. In the final workshop, students will be given the opportunity to present their projects and celebrate their accomplishments. All sessions will be offered virtually via Zoom.
Random food/restaurant picker app

Video demo: [https://youtu.be/1Ob-mWkSbf4](https://youtu.be/1Ob-mWkSbf4)
## Camp schedule

**Number of students:** 15-20 students per camp  
**Camp fee:** Free

<table>
<thead>
<tr>
<th>Date</th>
<th>Time (PST)</th>
<th>Grade</th>
<th>Sign-up link</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 26-30</td>
<td>10:00-11:30 am</td>
<td>4-5</td>
<td><a href="http://websurvey.sfu.ca/survey/440213324">http://websurvey.sfu.ca/survey/440213324</a></td>
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<tr>
<td>July 4-7</td>
<td>10:00 am-12:00 pm</td>
<td>6-7</td>
<td><a href="http://websurvey.sfu.ca/survey/440224421">http://websurvey.sfu.ca/survey/440224421</a></td>
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<td></td>
<td>Due to Canada Day (observed on July 3), workshops will run 10am-12pm from July 4-6 and 10-11:30am on July 7.</td>
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<tr>
<td>July 10-14</td>
<td>10:00-11:30 am</td>
<td>4-5</td>
<td><a href="http://websurvey.sfu.ca/survey/440232898">http://websurvey.sfu.ca/survey/440232898</a></td>
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<td>July 17-21</td>
<td>10:00-11:30 am</td>
<td>6-7</td>
<td><a href="http://websurvey.sfu.ca/survey/440246074">http://websurvey.sfu.ca/survey/440246074</a></td>
</tr>
<tr>
<td>July 24-28</td>
<td>10:00-11:30 am</td>
<td>6-7</td>
<td><a href="http://websurvey.sfu.ca/survey/440250063">http://websurvey.sfu.ca/survey/440250063</a></td>
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<tr>
<td>July 31-Aug 4</td>
<td>10:00-11:30 am</td>
<td>4-5</td>
<td><a href="http://websurvey.sfu.ca/survey/440266678">http://websurvey.sfu.ca/survey/440266678</a></td>
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<tr>
<td>Aug 8-11</td>
<td>10:00 am-12:00 pm</td>
<td>6-7</td>
<td><a href="http://websurvey.sfu.ca/survey/440277585">http://websurvey.sfu.ca/survey/440277585</a></td>
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<tr>
<td></td>
<td>Due to BC Day (Aug 7), workshops will run 10am-12pm from Aug 8-10 and 10-11:30am on Aug 11.</td>
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<tr>
<td>Aug 14-18</td>
<td>10:00-11:30 am</td>
<td>4-5</td>
<td><a href="http://websurvey.sfu.ca/survey/440285357">http://websurvey.sfu.ca/survey/440285357</a></td>
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</table>
Additional information
- The Zoom links will be open 30 minutes before the workshops start for students who wish to test their setup (e.g. is my audio working?).
- The deadline to register is a week before the start date of each camp.
- A confirmation email with further details (e.g. Zoom link) will be sent out a week before the start date of each camp.

Workshop overview

<table>
<thead>
<tr>
<th>Session</th>
<th>Workshop</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Day 1</td>
<td>Ideation</td>
<td>After attending the Ideation workshop, students will be able to plan their app design by creating paper prototypes.</td>
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</table>
| Day 2   | Thunkable 1.0| Our Thunkable workshops will cover the following:  
  - Introduction to the Thunkable interface  
  - Variables  
  - Functions  
  - Conditions  
  - Loops  
  - Database (read/write) |
| Day 3   | Thunkable 2.0| The progress of covering the concepts above will depend on the pace of the class. |
| Day 4   | Thunkable 3.0| Students will be given the opportunity to present their apps to the class and celebrate their work! |
| Day 5   | Show-and-tell| Students will be given the opportunity to present their apps to the class and celebrate their work! |
Workshop requirements

Basic requirements

- Internet access
- Laptop/Desktop computer
- Thunkable account: You can sign up here [https://thunkable.com/#/](https://thunkable.com/#/)
- System requirements:
  - [https://appinventor.mit.edu/explore/content/system-requirements.html](https://appinventor.mit.edu/explore/content/system-requirements.html)
  - The system requirements for Thunkable are not listed on its website. Since Thunkable is developed by the same research group that developed App Inventor, let's refer to the system requirements of App Inventor.
  - Web browser: Use this link to check your browser version [https://www.whatismybrowser.com/](https://www.whatismybrowser.com/)
- Wireframe templates (see PDF attached) and writing utensils:
  - If you have access to a printer, please remember to print at least two sheets of the wireframe template.
  - Alternatively, you could use two sheets of blank papers to draw your wireframes.
  - Please remember to bring your writing utensils. A pencil and an eraser would be preferred over using a pen (it’s less messy if you make mistakes).

Optional

- Mobile device or tablet with the Thunkable Live app installed.
  - Our workshops will introduce students to components of smartphones and tablets such as the accelerometer.
  - If students want to live test these features, they will need a mobile device or a tablet with the Thunkable Live app installed. The Thunkable Live app is free.
App Dev Summer Camps
Program overview and requirements

Image of the wireframe template provided to students. The PDF copy is attached with the email.
Welcome to the App Dev Summer Camp offered virtually by the SFU Applied Sciences Outreach! We are so excited that you have decided to join us. Our mission is to inspire, encourage, and support youths of all backgrounds to explore the many topics related to science, engineering, and technology through interactive and engaging activities. Before you join us, there are some guidelines we need everyone to follow to maintain the safety of everyone involved. See below for our Virtual Community Guidelines.

**Personal Safety:** We take safety seriously. If harm is disclosed or discussed (harm to self, or harming others) then we will take the appropriate steps to ensure your continued safety and the safety of those around you. Threats about others personal safety will not be tolerated.

**Respect:** Treat those online as you would treat them in-person that is with respect, dignity, and care.

**No Hate Speech or Bullying:** Bullying, discrimination, and harassment of any kind will not be tolerated.

**Communication:** Communication is encouraged in this workshop. Communicate with respect and listen to others when they speak or share ideas, which includes when sharing ideas out loud or via the chat function. Mute your microphone when not speaking and only turn your video on if you feel comfortable to do so.

**Privacy:** Respect the privacy and personal information of those in the shared virtual space by not sharing information that is not your own. Respect your own privacy by not sharing any personal information with those you do not know. Sharing of the Zoom link with those outside of the specific intended group is strictly prohibited.

**Copyright:** There will be no recording of anything that happens in this space, which includes participants and instructors taking pictures, recording parts of the workshop or recording their screen during any part of the workshop.

By joining the App Dev Summer Camp, you are considered to be in agreement with the above community guidelines. We will take the appropriate actions if any of the above guidelines are violated. Depending on the situation, this may result in revoking participation in the remaining workshops. Thank you in advance for your commitment to keeping our programs engaging, safe and of course, fun!
Contact

If you have questions, please do not hesitate to contact Eva (Outreach Programs Coordinator, SFU Faculty of Applied Sciences) at sacoord@sfu.ca.