DigiCamp: Online Video Game Development Camp for Girls

This summer, UTG Academy has partnered with DigiBC to bring you an online video game development camp for girls! The program will be student-directed and project-based where campers will get to create an HTML5 game using PixelPAD and Python. UTG instructors, Lydia Assion-Nielsen, Mia Gieselmann, and Linda Lee, will tune the curriculum to ensure students are given the opportunity to write code, change gameplay, design levels, update sprites, re-skin their game, and create an app that is uniquely their own.

The subsidized program is sponsored by IUGO Mobile Entertainment (a DigiBC member) and will also feature guest speakers, Amie Hulme (Technical Director, IUGO), Thais Campos (Quality Analyst, IUGO), and Reina Magica (Game Designer, IUGO) who will share their experiences, tips, and secrets from working in the video game industry.

This incredible opportunity is open to all girls 9-13 years old and no previous coding experience is necessary. UTG programs are centered on values rather than perfection, with a philosophy to education that is focused on supporting student motivations while challenging them to innovate, think critically, and solve problems with the latest technology. Additionally, the camp will be held online over Zoom so it can be taken from anywhere!

Ages: 9-13
Days: Monday-Friday
Time: 9:00 AM-12:00 PM PDT
Dates: July 12-16 or August 9-13, 2021
Location: Online (Zoom)
Cost: $125

DigiBC *represents the province's creative technology industry and our membership consists of companies that span the video game/interactive, animation, VFX, and VR/AR/XR sectors. Our mission is to ensure that creative technology, as a cornerstone of the broader technology ecosystem, grows and thrives in BC for the benefit of current and future generations.*

IUGO Mobile Entertainment is a Vancouver-based studio that was founded in 2003 by Hong Yee Wong to connect people through mobile games. They have since gone on to earn a solid reputation for producing chart-topping titles with major global publishing partners, as well as achieve their own success by self-publishing original games. IUGO is a proud member of DigiBC where they help promote the industry and pave the way for the next wave of mobile and tablet gaming.

Instructor Bios

Lydia Assion-Nielsen
Hello, my name is Lydia and I'm so excited to teach everyone! I am a graduate of LaSalle College's Game Art & Design program and the University of the Fraser Valley for early childhood education. At LaSalle, I was the recipient of the Outstanding Achievement Award at the portfolio show for the roguelike adventure game I designed, programmed, and created. I enjoy participating in game jams where I can put my skills and time management to the test trying to make the best game I can in a very short amount of time. When I'm not programming, I love creating art and using everything from pixels on screen to paint and clay. I see creating games as one of the most fun, challenging, and rewarding activities you could ever do.

Mia Gieselmann
Hi my name is Mia and I have been studying programming and computer science with Under the GUI for almost eight years. I went from grade 8 to the University Transition Program and then graduated this year. I am now looking forward to starting my undergrad at UBC in the fall! I like computers, robotics, coding, fencing, martial arts, and reading as much as I can. When I'm not at UTG or doing homework, I love going for walks with my family on the beach and relaxing with my cat.

Linda Lee
Hi, my name is Linda and I am a high school student from Burnaby. I run a coding club and lead the technology team for *Pages To Places*, a book donation organization at my school. My first coding language is C++ but I'm more comfortable coding in Java and HTML/CSS. In my spare time, I like to learn world languages, take photos, and draw cartoons. One day, I hope to master the art of pen spinning… or at least to the degree that is necessary. *Fun Fact: I like watching cartoons! Spongebob and Phineas & Ferb are among some of my favourites.*

COURSE GOALS

- Students have a basic understanding of computer programming and begin to understand the PixelPAD interface
- Students can ideate, generate and modify Python code
- Students finish with their own project, customized with their own art and features

LEARNING OUTCOMES

Computational Thinking and Algorithms

- Students understand and can describe the concept of variables
- Students can point to examples of variable usage and explain what it means

- Students can use basic PixelPAD and Python commands, including object_new(), sprite_new(), key_was_pressed()
- Students have an understanding of conditions in games and can use this logic to modify gameplay
- Students can use the Cartesian coordinate system in PixelPAD to position their objects appropriately in the game
- Students can take simple existing code and modify it to their liking

Creativity

- Students generate ideas and explore ways to implement ideas using pre-made functions and course assets on the PixelPAD platform

Prototyping, Testing and Debugging

- Students can trial and error to make changes, solve problems or incorporate new ideas from self or others

Construction

- Students can make a product using known procedures or through modeling of others

Communication & Collaboration

- Students can demonstrate their product and tell the story of designing and making it
- Students can use personal preferences to evaluate the success of their design solutions
- Students can reflect on each other's work