

Central Singapore CDC partners UOB to help 1,500 children pick up new digital skills through My Digital Bootcamp

Season 3 of the district-wide bootcamp introduces new Hackathon to encourage knowledge application and soft skills development

SINGAPORE, 13 March 2023 – 1,500 students from lower-income families in Central Singapore District will pick up new digital skills at the third edition of 'My Digital Bootcamp', sponsored by UOB. The district-wide programme will help level the playing field for children from disadvantaged backgrounds who may not have access to extra-curricular education. This is part of Central Singapore Community Development Council (CDC)'s SkillsFuture Junior movement, which aims to equip its young residents with digital and soft skills to be future-ready.

At each two-day Bootcamp held from May to December 2023, students will go through four modular skills-based workshops to learn advanced digital-making skills, such as robotics, mobile app development, game design and programming, in a fun and engaging manner. Participants can choose from two new immersive narratives: visit ancient civilisations as a space-time traveller or defuse a climate crisis as a hero of Earth (more information in Annex C). During the Bootcamp, they will also be exposed to complementary soft skills such as logical reasoning, pattern recognition, algorithm design, relationship management and communication skills, among others.

'My Digital Bootcamp' will provide the young participants with structured learning support to encourage learning beyond the workshops. Each child will bring home a special home-based learning (HBL) digital-making kit (more information in Annex D) comprising a micro:bit pocket-sized computer, a KittenBot expansion board, an ultrasonic sensor and other resource materials, complete with a learning management system, so they may continue learning and practising what they have learnt from the Bootcamp at home.

New Hackathon Component

A brand-new Hackathon component will be held at the end of this season where the young learners are empowered to solve real life scenario-based challenges in friendly competitions that undergird holistic learning. The Hackathon will involve 300 participants comprising students that attended the Bootcamps as well as new students.

In the two-day Hackathon challenge, participants will partake in digital-making skills workshops or refresher, preparatory workshops, competition and presentation. They will explore skillsets and develop competencies in soft skills beyond those taught in the Bootcamp including idea pitching, design thinking and ideation, that can help provide them a sturdy foundation for the future economy.



Strong Partnership between UOB and Central Singapore CDC

'My Digital Bootcamp' was made possible through Central Singapore CDC's longstanding partnership with UOB.

A steadfast supporter since the programme's inception in 2019, UOB has donated \$1.5 million across three seasons of 'My Digital Bootcamp', with \$500,000 attributed to Season 3. The funds contributed this year was from UOB Commercial Banking's annual Lunar New Year festive celebrations in 2022 that raised almost \$1.9 million for charity, in partnership with the Bank's clients.

More than 2,000 children from 34 schools and community organisations in Central Singapore have benefitted from the past two seasons of the programme since its launch in September 2019. Over 30 employee volunteers from UOB also befriended the students, distributed participation kits and meals, and helped to guide the students through their learning.

'My Digital Bootcamp' Season 3 kicked off at Cairnhill Community Club today with a cheque presentation ceremony, attended by Guest-of-Honour Ms Indranee Rajah, Minister, Prime Minister's Office & Second Minister for Finance & Second Minister for National Development, Ms Denise Phua, Mayor of Central Singapore District, and Mr Eric Lian, UOB's Head of Group Commercial Banking.

Close to 100 upper primary school students, aged 10 to 12, will be attending 8 workshops held concurrently at the event. They will learn to create digital products and bring home digital-making kits to continue learning at their own convenience.

Ms Indranee Rajah, Minister, Prime Minister's Office & Second Minister for Finance & Second Minister for National Development, said: "We want all our children to be future-ready. Some children have greater access to resources to acquire the skills for the future than others. My Digital Bootcamp bridges that gap and ensures that children can have access to digital skills irrespective of background. We also hope that these workshops will spark the spirit of innovation and creativity in these children and give them a positive experience with technology, so that they will see it as an enabler and not as a barrier."

Ms Denise Phua, Mayor of Central Singapore CDC, said: "I am thankful for corporates like UOB who give so generously to benefit communities and those in need. As technology constantly evolves, it is extremely important that the future generations of Singapore's workforce are equipped with digital skills. Programmes like My Digital Bootcamp will help level the playing field for those from disadvantaged backgrounds who may not have as much access to such extra-curricular education. I sincerely encourage all businesses to follow in the stead of UOB, not just to do well, but to do good for our communities and residents."

Mr Eric Lian, Head of Group Commercial Banking, UOB, said: "UOB is proud to support initiatives that positively impact our community. We are honoured to contribute towards My Digital Bootcamp, a programme which will help develop the young minds and build their confidence to thrive in an increasingly digital world. It is a testament to UOB's promise to do right by our community and our commitment to invest in the future of our youth while challenging them to push the boundaries of possibilities."



My Digital Bootcamp is one of 52 programme offerings under Central Singapore CDC that aims to better support its residents in their journey of lifelong learning. Interested primary schools with and community organisations serving children from lower-income families in Central Singapore District can write to <u>PA_CentralSingapore@pa.gov.sg</u>. More details can be found in Annexes below.

END

Encl. – Annex A: My Digital Bootcamp Project Overview Annex B: My Digital Bootcamp 2023 Factsheet Annex C: Summary of My Digital Bootcamp Storylines Annex D: Home-based Learning Kit

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Central Singapore CDC

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<u>UOB</u>

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About Central Singapore Community Development Council

Situated at the heart of Singapore, Central Singapore Community Development Council (CDC) serves close to one million residents living in Ang Mo Kio, Bishan-Toa Payoh, Jalan Besar and Tanjong Pagar Group Representation Constituencies (GRCs), and Kebun Baru, Marymount, Potong Pasir, Radin Mas, as well as Yio Chu Kang Single Member Constituencies (SMCs). The CDC envisions itself as a Do-Good district that aims to help our residents live The Better Life. It works in close partnership with schools, voluntary welfare organisations (VWOs), grassroots organisations (GROs), government and commercial agencies to fulfil its mission as an Aggregator of needs and resources; Builder of capability/capacity in partners and networks; and Connector of communities.

About UOB

UOB is a leading bank in Asia. Operating through its head office in Singapore and banking subsidiaries in China, Indonesia, Malaysia, Thailand and Vietnam, UOB has a global network of around 500 offices in 19 countries and territories in Asia Pacific, Europe and North America. Since its incorporation in 1935, UOB has grown organically and through a series of strategic acquisitions. Today, UOB is rated among



the world's top banks: Aa1 by Moody's Investors Service and AA- by both S&P Global Ratings and Fitch Ratings.

For nearly nine decades, UOB has adopted a customer-centric approach to create long-term value by staying relevant through its enterprising spirit and doing right by its customers. UOB is focused on building the future of ASEAN – for the people and businesses within, and connecting with, ASEAN.

The Bank connects businesses to opportunities in the region with its unparalleled regional footprint and leverages data and insights to innovate and create personalised banking experiences and solutions catering to each customer's unique needs and evolving preferences. UOB is also committed to help businesses forge a sustainable future, by fostering social inclusiveness, creating positive environmental impact and pursuing economic progress. UOB believes in being a responsible financial services provider and is steadfast in its support of art, social development of children and education, doing right by its communities and stakeholders.



ANNEX A

My Digital Bootcamp Project Overview

Project Name	My Digital Bootcamp Season 3
Objective of Project	 To allow children from disadvantaged backgrounds to learn new digital-making skills through: Thematic Storylines Modular Skills-Based Workshops Home-Based Learning Hackathon
Who Can Benefit?	 Open to children in Central Singapore district who are: Singaporean or Permanent Resident 10 to 12 years old (or in Primary 4, 5, or 6) From families with total household monthly income of S\$6,900 & below, or S\$1,725 & below per family member
Project Period	March to December 2023
Application Process	Students must be nominated by their school or organisation. Interested primary schools and community organisations with children from lower-income families in Central Singapore District can write to Mr Qamar Firdaus or Ms Melissa Lim at <u>PA_CentralSingapore@pa.gov.sg</u> .
Sponsor & Amount	S\$500,000 for My Digital Bootcamp Season 3, sponsored by UOB. Total Sponsored Amount: S\$1.5 Million



ANNEX B

MY DIGITAL BOOTCAMP 2023 FACTSHEET

WHY MY DIGITAL BOOTCAMP?

In the current digital landscape, children build strong digital literacy and computational thinking skills through various learning opportunities. These include enrichment classes and camps provided for by the school, and holiday programmes which the parents/guardians enrol the child in.

My Digital Bootcamp provides children from disadvantaged backgrounds with access to similar digital learning opportunities.

This is one of the initiatives under Central Singapore CDC's SkillsFuture Junior movement. Children from disadvantaged backgrounds are equipped with relevant 21st century skills. This movement complements the long-term national SkillsFuture efforts: to give Singaporeans from all walks of life the opportunity to develop skills relevant to the future.

WHAT IS MY DIGITAL BOOTCAMP (SEASON 3) AND HOW IS IT CONDUCTED?

My Digital Bootcamp is an experiential and hands-on day camp that **equips children with digitalmaking skills** and allows children to **understand the current digital landscape**.

In the third iteration of My Digital Bootcamp i.e. My Digital Bootcamp (Season 3), children will be exposed to all-new digital-making skills and storylines. Children will go through one of these storylines: *Space Time Adventure*, or *Heroes of Planet Earth (HOPE)*.

Each child will deepen their learning and be equipped with <u>4 different digital-making skills</u> and receive a specially curated <u>home-based learning (HBL) Digital-Making Kit</u>, complete with a <u>learning</u> <u>management system</u>.

At the end of the season, children can look forward to a Hackathon, where they can solve real-life scenario-based challenges through a competition format.



ANNEX C

SUMMARY OF MY DIGITAL BOOTCAMP STORYLINES

SPACE-TIME ADVENTURE HEROES OF PLANET EARTH (HOPE) "In a world where time travel became a reality, a group of students were selected to participate in a "Space Time Adventure. "It is the year 2053. Deep sea mining near Antarctica has accidentally disturbed a huge pool of frozen methane on the seabed. Methane gas enters the atmosphere, accelerating the climate crisis. As the students stepped into the time machine, a brilliant scientist, K, greeted them enthusiastically. He explained that they would be traveling back in time to four ancient civilizations and experience history in a way that they never thought possible." Temperatures in Singapore have gone beyond 40 degrees Celsius, putting the elderly at risk of heat stroke. Huge wildfires are ravaging Sumatra and Kalimantan, sending thick haze pollution across the region. The rising sea level causes flooding in Chinatown, where many elderly live. The United Nations asks Singapore to activate Ops HOPE. The world needs heroes. Equip yourself with the skills to invent solutions that will lead us out of this planetary emergency." SCHOOLS/ORGS TO CHOOSE 4 OUT OF 8 MODULE 1: MYSTERY OF THE PYRAMIDS Game Design using MakeCode Arcade MODULE 1: CLEAN SOURCES OF ENERGY Energy-Saver Prototypes using micro:bit MODULE 2: ANCIENT EGYPTIAN HIEROGLYPHS Artificial Intelligence (AI) Translator using Kittenblock MODULE 2: RISING SEA LEVELS Build AR/VR game using CoSpaces MODULE 3: PAYING TRIBUTE TO EMPRESS CONSORT MUMTAZ MAHAL Programming wireless musical instrument using micro:bit MODULE 3: STAYING CONNECTED IN A CRISIS Build an Informational Mobile App using Thunkable			
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MODULE 4: FLOODING OF THE GANGES RIVER MODULE 4: AI MAKES THE EARTH LAST LONGER			
Building an IoT device using Arduino Create Practical Machine Learning Models using Teachable			
Machine			
MODULE 5: HANGING GARDENS OF BABYLON MODULE 5: CLIMATE ACTION FOR EVERYONE			
Building a Smart Watering System using micro:bit Create Climate Action Games using Scratch			
MODULE 6: BABYLON IRRIGATION MODULE 6: FIRES & DEFORESTATION			
Design a game using Kittenblock Data Analysis and Map-Making using GIS and Google			
MODULE 7: THE GREAT WALL OF CHINA MODULE 7: WARMING CLIMATES Programming Autonomous Cars using Arduino Build a 3D Model of a climate-friendly building using			
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MODULE 8: CENSUS REGISTRATION DURING QIN MODULE 8: CLIMATE-FRIENDLY DIETS			
DYNASTY Build Infographics using Canva			
Develop Mobile App using Thunkable			
CHILDREN TAKE HOME THE FOLLOWING IN THE DIGITAL-MAKING KIT:			
Micro:bit Kit Micro:bit Kit			
Add-ons such as: Add-ons such as:			
Ultrasonic Sensor Servo Motors			
Fan Module LED Bulbs			
NeoPixel LED Strip Alligator Clips			
Jumper Wires Jumper Wires			
KittenBot IOBit Expansion Board CoSpaces Edu Pro License (1 year subscription)			
Pre-cut Cardboard House (for smart home prototype) Cardboard VR Goggles			



ANNEX D

HOME-BASED LEARNING (HBL) DIGITAL-MAKING KIT

'SPACE-TIME ADVENTURE' DIGITAL-MAKING KIT

ITEM	DESCRIPTION
	Micro:bit v2.2 kit The micro:bit V2.2 is a pocket-sized computer that introduces you to how software and hardware work together. It has an LED light display, buttons, sensors and many input/output features that, when programmed, let it interact with you and your world.
States	KittenBot IOBit v2.0 The KittenBot IOBit v2.0 is a low-cost expansion board for the micro:bit. It has expanded all the IO resources on the micro:bit for use and it also comes with a buzzer on the board.
	Ultrasonic Sensor The ultrasonic sensor is a sensor that can measure short to medium distances from solid surfaces via sonar location. Ultrasonic sound waves are emitted from the device which bounce off surfaces. The return waves are measured, and the time taken to return (along with the known speed of travel) are used to calculate distance.
	Fan Module The fan module is an output module that can be controlled by the micro:bit and other sensors. The speed of the fan rotation can be operated using PWM to change the fan rotation speed.
	NeoPixel LED Strip A NeoPixel is an individually addressable, colour-changing LED that can be controlled from a single pin on the micro:bit. NeoPixels can be chained together and are often supplied as tapes or in accessories that contain multiple NeoPixels.



ITEM	DESCRIPTION
	Jumper Wires Jumper wires are electrical wires with connector pins at each end. They are used to connect two points in a circuit without soldering.
22cm 20cm 20.5cm	Cardboard House Pre-cut cardboard house to create a smart home.

'HEROES OF THE PLANET EARTH (HOPE)' DIGITAL-MAKING KIT

ITEM	DESCRIPTION
Part or bott o	Micro:bit Kit A tiny, programmable computer that lets you get creative with digital technology.
	Servo Motor This motor can be controlled with a Micro:bit computer and has attachments like cardboard pieces attached to it to create a wide range of prototypes.
	LED BULBS (ASSORTED COLOURS) The LED bulbs can be controlled with a Micro:bit to create prototypes involving different lights and colours.



ITEM	DESCRIPTION
	Alligator Clips Alligator clips are used to attach components such as LED bulbs to Micro:bit.
	Male Jumper Wires Used alongside the alligator clips, the male jumper wires help to attach servo motor to Micro:bit.
	Cardboard VR Goggles Insert smartphone into the viewer to immerse into a CoSpaces VR environment.
CO SPACES EDU	CoSpaces Edu Pro License Create unlimited CoSpaces projects, full access to the 3D objects library and other cool features not available in the basic (free) version.