



**UNIVERSITY
OF MALAYA**

**REPORT
COMMUNITY ENGAGEMENT**

[MESTECC MENTOR-MENTEE STEM]
(GIG1005)
INFORMATION SYSTEM AND DATA SCIENCE
DEPARTMENT

‘BITS WITH KIDS’



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1. INTRODUCTION

‘Bits with Kids’ is a community engagement program under the university course Social Engagement (GIG1005), which aims to share knowledge about computer science with schools’ students. This program is developed by GIG1005 university students from the Department of Information Systems and Data Science program. The University students (GIG1005 students) will become the mentors of the program, whereas the school students will be the mentees.



Picture 1: Dr Azah, Dr Suraya and 5 members from Executive Team at SK Bukit Lanjan

This program used practical approaches to teach mentees about computer science. The activities designed in the program does not require the mentees to have access to any technology (i.e. computers or smartphones) as we believe the mentees can learn computer science without a computer. The activities in this program will introduce the mentees to computer science basics such as logic gates, programming fundamentals, ASCII codes and image representation.

This program used an online approach by sharing activity videos developed by the mentors of the program to reach out to the mentees. The mentees involved in this program are siblings or relatives living together with the mentors.

2. PROJECT

i. Project name

The name of this project is ‘Bits With Kids’.

ii. Objectives

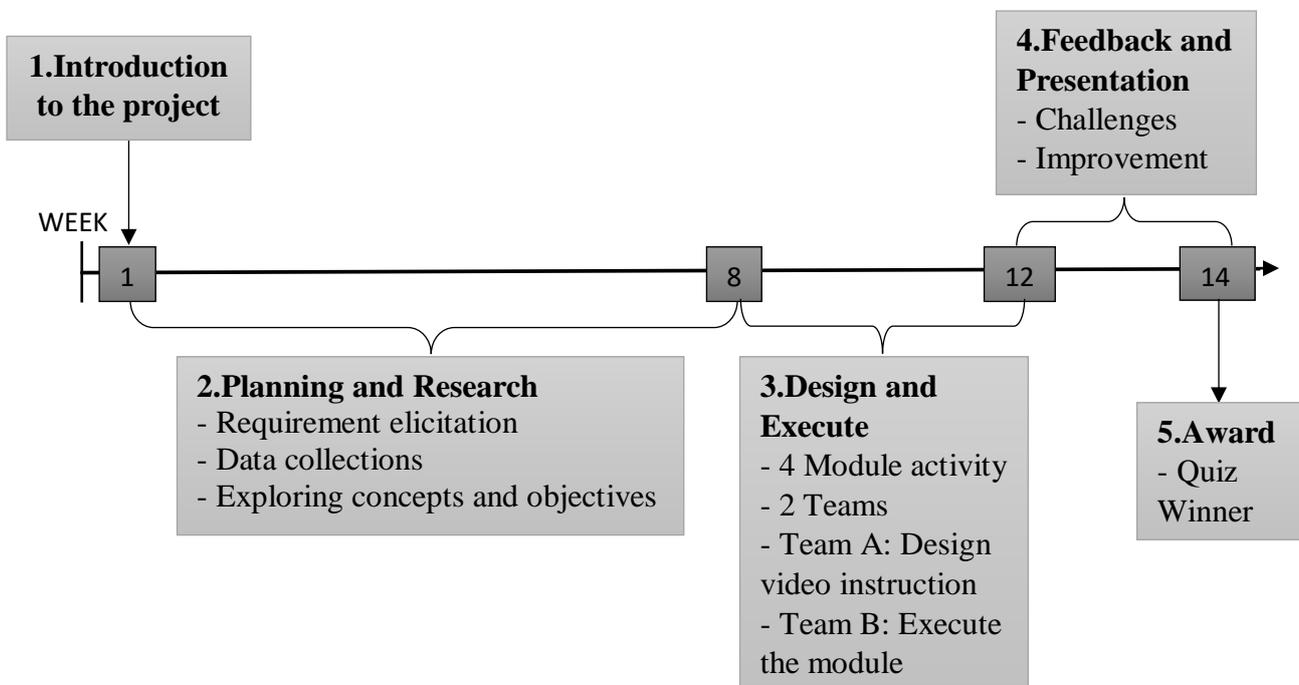
The objectives of this project are to deliver awareness and train school students to learn science, technology, engineering and mathematics (STEM) through a variety of activities. To be able to execute knowledge sharing with the school students. Be a platform for students from our departments to communicate with the community.

iii. Task distribution

ROLE	TASK DESCRIPTION
DIRECTOR	<ul style="list-style-type: none"> ● Monitors the overall situation throughout the program ● Ensures the program goes as scheduled and runs smoothly ● Gives proper orders to the committee's members
VICE DIRECTOR	<ul style="list-style-type: none"> ● Helps the director to ensure the program run as scheduled ● Manages google drive folders for the program
SECRETARY	<ul style="list-style-type: none"> ● Writes the proposal for the program ● Updates and records the information all the activities during the program execution ● Writes the final report of the program
TREASURER	<ul style="list-style-type: none"> ● Manages the program's expenses ● Responsible for any financial properties and issues ● Prepares and revises the financial report ● Writes final report of the program
DEPARTMENT OF SPONSORSHIP	<ul style="list-style-type: none"> ● Prepares E-Certificate for all the school students ● Sends the E-Certificate to all the participants
DEPARTMENT OF MODULE DEVELOPMENT	<ul style="list-style-type: none"> ● Implements the correct module based on the program's objective ● Revises the whole activities for the program ● Ensures the objectives of the module implemented is reached ● Keeps track of all the activities from Team B
DEPARTMENT OF UTILITIES	<ul style="list-style-type: none"> ● Keeps track of all the activities from Team A ● Prepares and manages logbooks for the mentors to submit their video
DEPARTMENT OF PUBLICITY	<ul style="list-style-type: none"> ● Creates and manages YouTube, Instagram and Facebook account for the program ● Prepares news template for the program
DEPARTMENT OF PROGRAMME PROTOCOL	<ul style="list-style-type: none"> ● Manages the execution of the program ● Manages all the video sharing and resources (collection and dissemination via virtual drive) ● Takes care of the team list with their video resources in virtual.
DEPARTMENT OF LOGISTIC	<ul style="list-style-type: none"> ● Revises and checks the final report of the program
DEPARTMENT OF MULTIMEDIA AND TECHNICAL	<ul style="list-style-type: none"> ● Creates a logo for the program ● Compiles all the videos, resources, pictures and multimedia. ● Prepares storyboard for short documentary

	<ul style="list-style-type: none"> • Develops a short documentary for the whole program
TEAM A	<ul style="list-style-type: none"> • Creates an instruction video about the activities executed • Prepares report for presentation
TEAM B	<ul style="list-style-type: none"> • Helps and guides the mentees to execute the activities • Prepares report for presentation

iv. Modules development



v. Project execution

This project involved 69 students from the Faculty of Computer Science and Information Technology University of Malaya as a mentor. This included 46 students from the Department of Information Systems and 23 students from the Data Science Program. Originally, we have 50 students from Department of Information Systems but four of them have changing their course. This project was executed by online video calls for meetings and discussions, video recordings as teaching materials and online quizzes to assess school students' understanding of the modules that were taught. This happened due to the Covid-19 pandemic constraints especially the execution of Movement Control Order (MCO). This activity was conducted only for mentor's siblings or any relatives living with the mentors. The school students that were involved in this project range from 5-year-olds to 17-year-olds.



Picture 2: Dr Azah gave explanation about GIG1005 course during first class

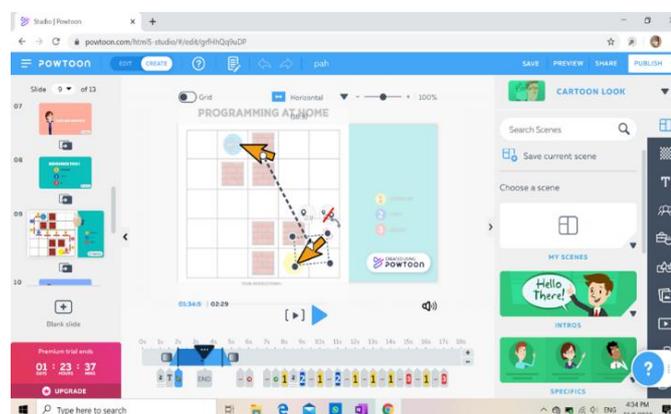
There are four modules being executed which were 'A Way Out', 'Programming at Home', 'Unpuzzled ASCII' and 'Image Representation. These modules helped the mentees to learn and understand the fundamentals of Computer Science easily. These activities also showed that the mentees can learn computer science in many interesting ways without using computers.

The first module is 'A Way Out'. This module explains about logic gates to the mentees in the easiest possible way. Logic gates are one of the basic components and it is widely used in computer components. So, this module taught the mentees to understand how the logic gates work by determining the output of logic gates based on the inputs given.



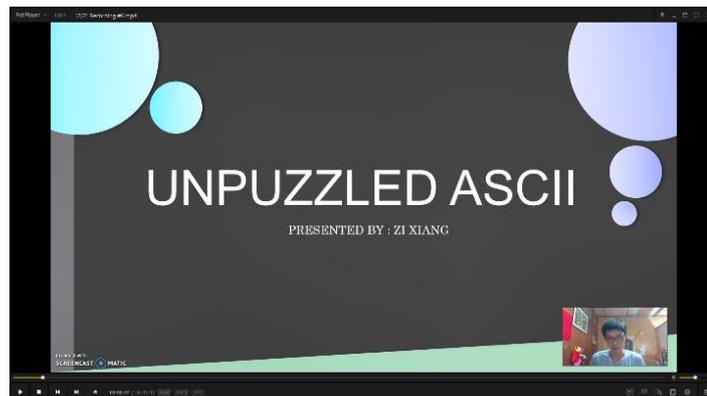
Picture 3: 'A WAY OUT' instruction video by Raja Alfiq

Next module is 'Programming at Home'. This module explains the fundamentals of programming to the mentees without using computers. Mentors will provide easy instructions in the form of programming codes to the mentees and mentees will need to use the codes to avoid all the set-up obstacles in order to reach the goal. This module will help the mentees to understand how the computers receive the instructions that had been programmed. Besides, mentees also can improve their creative thinking skills in solving problems.



Picture 4: 'PROGRAMMING AT HOME' instruction video edited using Powtoon

The third module is ‘Unpuzzled ASCII’. ASCII stands for ‘American Code for Information Exchange’ and has been used in digital technology such as computers to communicate with one another. In this module, mentees need to convert the codes into understandable characters based on the ASCII-Binary table given by the mentors.



Picture 5: ‘UNPUZZLED ASCII’ instruction video by Zi Xiang

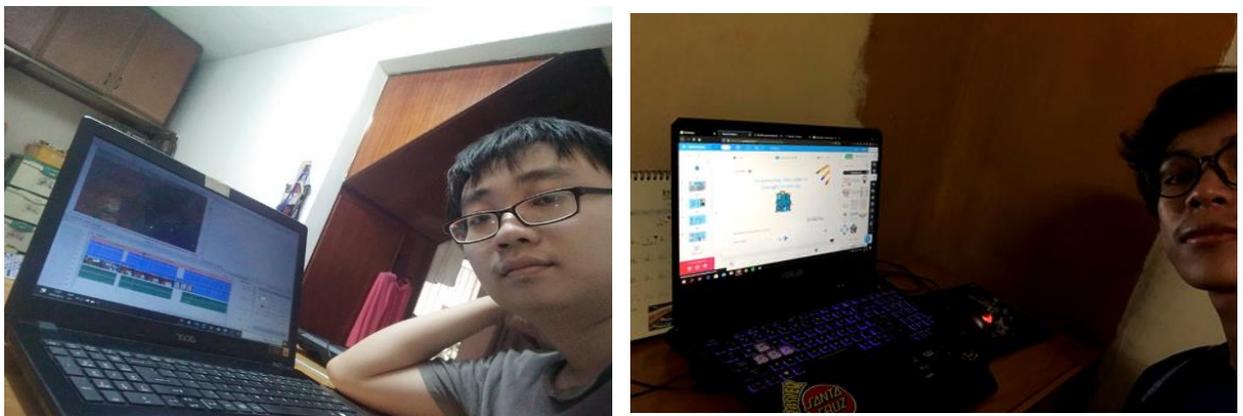
Lastly, ‘Image Representation’ module introduces the concept of pixels and how images are represented in the computers using pixels. Mentees will be given a piece of paper to color based on pixel number code given by the mentors. Then, an image will be appeared as the mentees completed the task.



Picture 6: Behind-the-scene ‘IMAGE REPRESENTATION’ instruction video

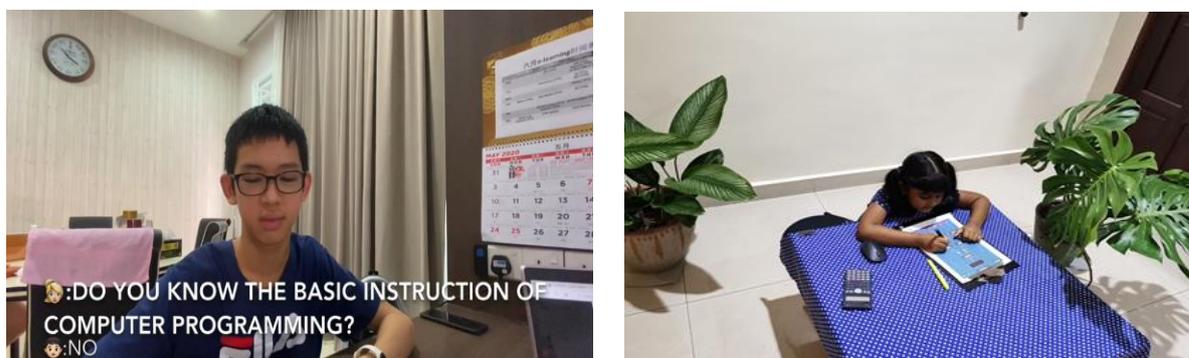
So, in order to execute this project perfectly, we were divided into two big groups, Team A and Team B. Team A is for students with no kids while Team B is for students with kids. Then, Team A and Team B were further divided into smaller groups that consist of 4 or 5 people per group.

Students from Team A will make an instruction video to give some explanation about the ways to execute all the module activities. The video must explain the objectives of the activity, introduction to the activity, explanation on how to perform the activity and the conclusion reached after executing the activity.



Picture 7: In-the-making of instruction video by students from Team A

Next, students from Team B will use that instruction video to show the mentees before they start the activity. Mentees can choose any modules that they want to do. Then, the mentors will be responsible to help and guide the mentees to execute the activity chosen. Mentors also need to record videos throughout the activity. The video must show improvement of the mentees in understanding the module that was taught by the mentors.



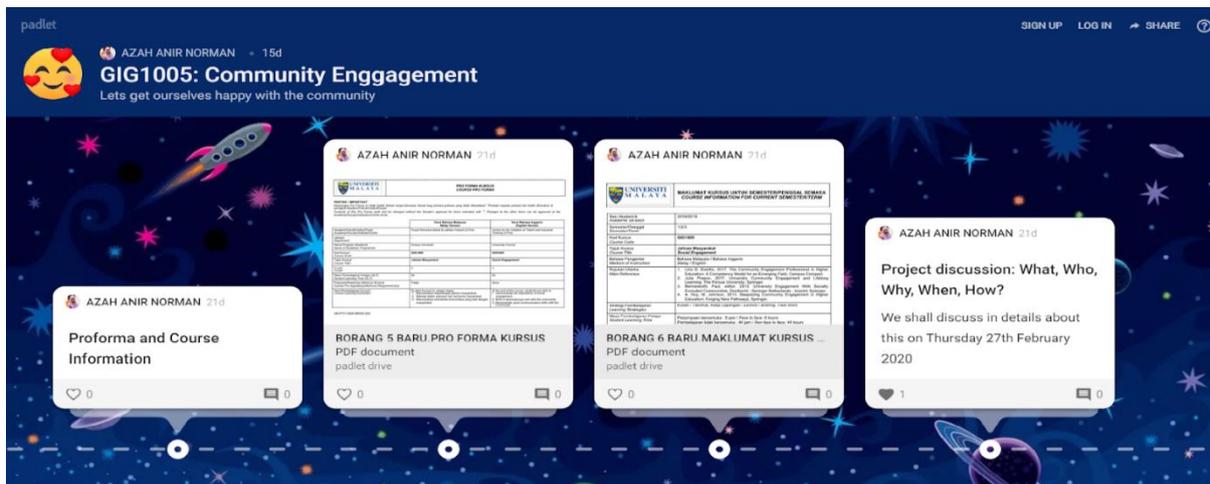
Picture 8: Mentee are doing the activity given

In addition, we also provided online quizzes related to the executed modules to test the depth of understanding of the module after conducting the activity chosen. There are 3 prizes offered for each module to the winner who have scored the highest marks in the quiz. Finally, as an appreciation to the mentees for their excellent cooperation and performance in this project, we provided them with an e-Certificate as a token.

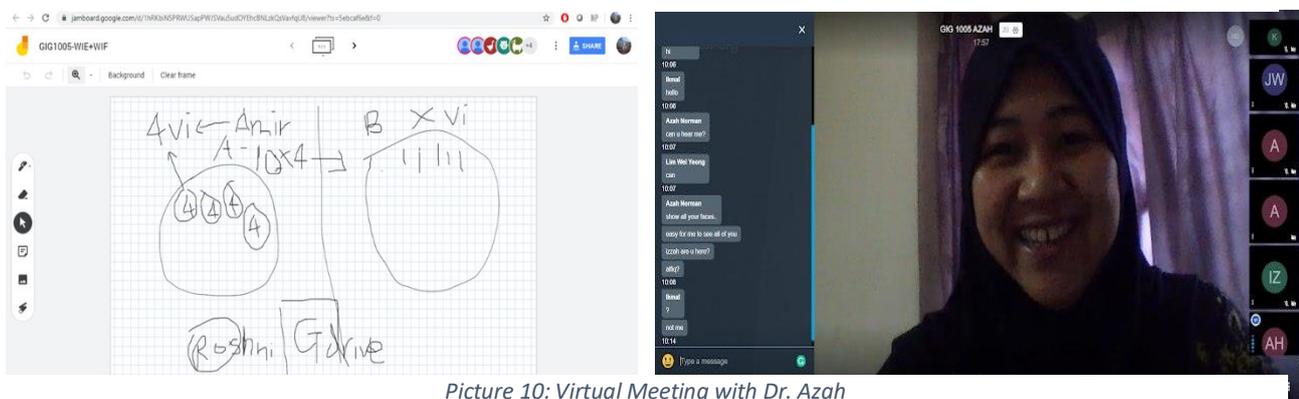
vi. **Weekly report**

WEEK	ACTIVITIES
1 (20/2/2020)	<ul style="list-style-type: none"> • No class
2 (27/2/2020)	<ul style="list-style-type: none"> • Dr Azah gave some briefing about the course and the project that we will be executing throughout the semester • Selection of the committee members
3 (5/3/2020)	<ul style="list-style-type: none"> • Students discussed about the themes for the module • 5 themes from Sustainable Development Goal (SDG) <ul style="list-style-type: none"> - Zero Hunger - Clean Water and Sanitation - Affordable and Clean Energy - Climate Action - Life Below Water
4 (12/3/2020)	<ul style="list-style-type: none"> • Dr Azah, Dr Suraya and 5 people from committee members had a meeting at Sekolah Kebangsaan Bukit Lanjan. • Other students discussed module development during the class session with the leads of the vice president and the Logistic Team's Head of Department.
5 (19/4/2020)	<ul style="list-style-type: none"> • All face-to-face activities were cancelled due to Covid-19
6 (30/4/2020)	<ul style="list-style-type: none"> • Students discussed new activities to be planned on Whatsapp.
7 (7/5/2020)	<ul style="list-style-type: none"> • Virtual meeting with Dr. Azah • Dr Azah gave new teaching plan for all the students
8 (14/5/2020)	<ul style="list-style-type: none"> • Virtual meeting with Dr Azah. • Dr Azah explained about how to execute this program virtually • New tasks were being assigned to some of the departments

	<ul style="list-style-type: none"> The submitted proposal had been approved
<p>9 (21/5/2020)</p>	<ul style="list-style-type: none"> Team A (no kids team) made an instruction video for the activity modules Team A submitted their video through Google Drive
<p>10 (28/5/2020)</p>	<ul style="list-style-type: none"> Team B (with kids team) executed the modules with their mentees
<p>11 (4/6/2020)</p>	<ul style="list-style-type: none"> Team B (with kids team) executed the modules with their mentees
<p>12 (11/6/2020)</p>	<ul style="list-style-type: none"> Virtual meeting with Dr Azah and committee member to ask some questions Dr Azah explained about peer evaluation and presentation that will be held on week 13 and week 14
<p>13 (18/6/2020)</p>	<ul style="list-style-type: none"> Group presentation
<p>14 (25/6/2020)</p>	<ul style="list-style-type: none"> Group presentation



Picture 9: Padlet for Week 1 online class



Picture 10: Virtual Meeting with Dr. Azah

vii. Result

Based on the objectives of this program, we managed to achieve the goals in our objective which is to teach school students about computer science without using computers in interesting ways. This result was shown from the quizzes we made and pre-test questions. The results showed that the kids understood what they had learned in this project as they could answer all the questions easily.



Picture 11: Students from Team A are preparing to record the instruction video

As for the mentor, we improved our communication skills as we needed to find the easiest way to interact with the kids and ensure the kids understood what we wanted to convey. We also got the opportunity to share our knowledge while taking this Computer Science course as well as to encourage the kids to take this course in the future. Besides, this project strengthened the bonds between the mentors and the kids. Frederick Lenz, a spiritual teacher, and a software engineer once said “Computer Science is fascinating. As you study computer science, you will find that you develop your mind.”

viii. Challenges

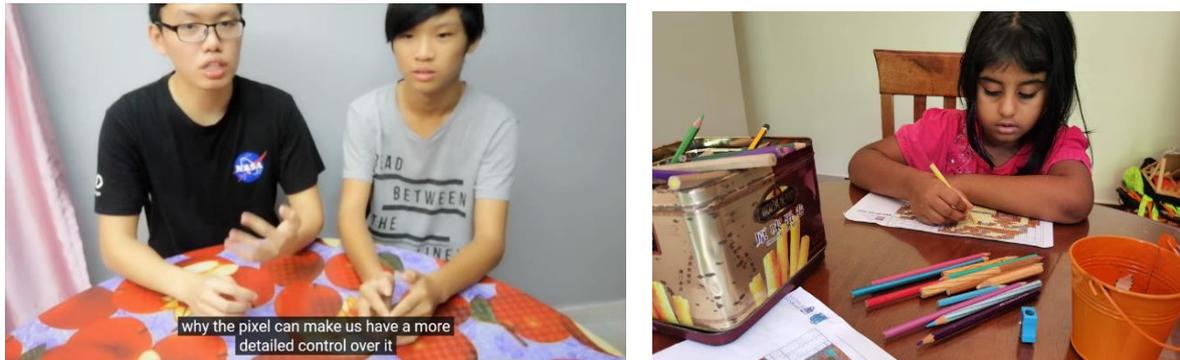
There were some challenges we faced during the execution of this project. The biggest challenge we encountered was the internet connection problem. All the activities, discussions and presentations were conducted online. We needed to have a strong internet connection to make sure there was no lag and every information during discussions and presentations must be conveyed clearly. Some of us have poor internet connection and it affected the online meeting which made it a challenge to interact with the others.



Picture 12: Some students are having difficulties with Internet connection

In addition, since everything was done online, we couldn't meet physically. Thus, it was quite hard to get fast responses from each other in the group because of the connection problems, different online times or having different schedules.

The next challenge was to get school students to become mentees for the project. We were not allowed to hold public meetings and were directed to stay at home. So, this limited our movement for this project. Therefore, we decided to look for children who are 5 years old and above and the kids must be the siblings or relatives of the mentors. For those who do not have kids nearby, they created videos showing the ways to carry out the activities as planned.



Picture 13: Mentee from age 5 to 17 can join this activity

Last but not least, we were having language barriers between the kids and the modules because some of the kids cannot understand English language yet while all the instruction videos were made in English. The kids could not understand what we wanted to convey so we needed to translate the instructions in their mother language. Besides, lack of video editing experience by the mentors made it harder for the project.



Picture 14: Mentor was giving some explanation about activity execution to the kid



Picture 15: Kids are having difficulties to understand the instruction video because of the language barrier

3. REFLECTIONS AND IMPROVEMENT

Due to the Movement Control Order (MCO), a lot of changes were made especially in our module execution. Some of our modules originally needed to be carried out in an open space and needed a lot of preparations but we changed the modules to be home-friendly so everyone can execute the modules at home easily.



Picture 16: Meeting with school's teachers from SK Bukit Lanjan

Some improvements we can make to revamp our project execution are we can try to lower the level of our explanation to kids' level. It is because most of the instruction videos used some complex words and language that made it hard for kids especially primary school kids to understand the explanation. We should try to explain in the easiest way to attract the kids' attention and make sure they understand what we wanted to convey through the video.



Picture 17: Students from Team A making a video using software

Next, we can improve our editing skills to make the videos fun and interesting to watch. Most of us used PowToon to edit the video and some of the videos only had background music without any voice-over. This made the video slightly boring because the kids needed to read it by themselves. So, by improving our editing skills, we can make the videos more interesting.

Other than that, we need to make full preparations before starting the activity. It is because without proper preparations, it will drag the activity execution time. As for the final presentation, we must prepare all the materials for the presentation so that everything will go smoothly and end on time. We must have a backup plan as an alternative to solve our problems during the presentation. Unlike the final presentation, most of us had problems with our video such as audio issues and this made our presentation ended late.

4. APPENDIX**List Name for Quiz Winner****Module 1: 'A WAY OUT'**

NO.	WINNER	MENTOR
1	Nurshamina Amani binti Mohd Shahir Rahimi Ammarshah Khawarizmi bin Shahir Rahimi	Mohamad Naim Afnan bin Mohamad Yusof
2	Mukhsin Khalili bin Ibrahim	Mardhiyyah binti Ibrahim
3	Teo Rickson	Teo Richie

Module 2: 'PROGRAMMING AT HOME'

NO.	WINNER	MENTOR
1	Teo Rickson	Teo Richie
2	Emran Harris M Zainudin	Ayesha binti Mohd Ramli
3	Kloey Chua Yee Yann	Gan Joo Han

Module 3: 'UNPUZZLED ASCII'

NO.	WINNER	MENTOR
1	Alif Putra bin Mohd Nasir	Nurul Asyiqin bin Mohd Nasir
2	Phong Xiao Wei	Phong Jia Wei
3	Emir Harris M Zainudin	Ayesha binti Mohd Ramli

Module 4: 'IMAGE REPRESENTATION'

NO.	WINNER	MENTOR
1	Emir Harris M Zainudin	Ayesha binti Mohd Ramli
2	Nafiz bin Maizul Lizan	Maisarah binti Maizul Lizan
3	Muhammad Emir Riaz bin Shahrin	Muhammad Emir Rais bin Sharin

Modules Description

MODULE 1

Name	A Way Out
Objective	<ol style="list-style-type: none"> 1. To introduce how logic gate works to the student in a fun and attractive way. 2. To introduce the basic of CS to the student.
Duration	30 minutes
Materials	Printed A4 papers (Games circuit), Marker Pen
Question	<p><u>Pre-test</u></p> <ol style="list-style-type: none"> 1. What is the use of logic gate in computer component? 2. How do logic gates work in producing certain output? 3. Is it possible for you to complete the task without planning and emphasising the problem? <p><u>Post-Test</u></p> <ol style="list-style-type: none"> 1. What is the use of logic gate in computer component? 2. How do logic gates work in producing certain output? 3. Do planning and empathising the problem help in solving it? 4. Do you find understanding logic gate difficult? 5. If given an input could you figure out which gates should be used to produce specific output?
Methodology	<ol style="list-style-type: none"> 1. Mentor will give a short briefing about logic gates (“And” and “Or”) sufficient for the children to complete the activities. 2. Mentors will be a given a printed A4 paper (Games circuit). 3. Every single A4 paper will be given different input. 4. Student will have to figure out which input would complete the circuit. 5. Throughout the activity, mentor should try to drive the children in using the 5 stages of design thinking.
Conclusion/Outcomes	<ol style="list-style-type: none"> 1. Students will understand about how logic gates work and have basic knowledge in computer science. 2. Students can practice using 5 stages of design thinking to solve CS problems.

MODULE 2

Name	Programming At Home
Objective	<ol style="list-style-type: none"> 1. To introduce the fundamental of programming without the use of computer in an interesting way. 2. As a platform for the students to practice using design thinking.
Duration	30 minutes
Materials	<p><u>Human Size Miniature</u></p> <p>Instruction cards(forward,90 degree clockwise,90 degree anti clockwise), tiles, goal marker</p> <p><u>Miniature sized</u></p> <p>Template printed A4 paper, pen</p>
Questions	<p><u>Pre-test</u></p> <ol style="list-style-type: none"> 1. Do you know what is coding? 2. Do you know how a computer generates a result (i.e. a calculator doing additions)? 3. Do you know basic instruction of computer programming? <p><u>Post-test</u></p> <ol style="list-style-type: none"> 4. Do you know what is coding? 5. Do you know how a computer generates a result (i.e. a calculator doing additions)? 6. Do you know basic instruction of computer programming? 7. Do you think computer could generate its own output? 8. Do you think robot receive instruction from human?
Methodology	<ol style="list-style-type: none"> 1. Mentor will give a short briefing about programming. 2. Mentors are to carry out this activity either in Human Size or Miniature Size (by using a board) <p><u>Human Size</u></p> <ol style="list-style-type: none"> 3. Find a spacious area with tiles in your house. 4. Mentor should set the start,goal and obstacle components on the desired tiles. 5. Student are given a set instructions card to be used for them to move from the start to the goal without hitting any obstacles.

	<ol style="list-style-type: none">6. Students are to arrange their steps before entering the grids.7. Students can now enter the grid and follow the instructions that have been arranged by them earlier.8. Students succeed once they have reached the goal. <p><u>Board size</u></p> <ol style="list-style-type: none">9. Mentors would have to print a template with grids beforehand.10. Step 2 – 6 as Human Size.
Conclusion/Outcomes	<ol style="list-style-type: none">1. Students will understand the basic of computer programming and instructions.2. Students will have deeper understanding on how to implement design thinking in every problem solving.

MODULE 3

Name	Unpuzzled ASCII
Objective	<ol style="list-style-type: none"> 1. To teach the student on how computer encode from electronic communication to understandable human words. 2. To build fundamental understanding towards electronic communication.
Duration	30 minutes
Materials	A4 paper(ASCII sentence written),A4 paper (ASCII chart), pen
Question	<p><u>Pre-test</u></p> <ol style="list-style-type: none"> 1. Do you know what is ASCII code? 2. How is information transferred from one device to other? 3. What do you understand about electronic communication? <p><u>Post-test</u></p> <ol style="list-style-type: none"> 1. How did computer decode human message? 2. Why ASCII code were used in electronic communication? 3. What happen if you key in the wrong input? 4. Do you find ASCII code difficult?
Methodology	<ol style="list-style-type: none"> 1. Head of Mentor will give a short briefing on ASCII code. 2. Mentors will have to print the ASCII sentence template and chart. 3. Mentor should first show student how to decode. 4. Based on the ASCII chart the student will try to decode the sentence. 5. Once the student complete, they will have to read the sentence and check if they make any mistakes.
Conclusion/Outcomes	<ol style="list-style-type: none"> 1. Students will have basic understanding on ASCII code and how electronic communication works. 2. Students could implement the emphasise stage in design thinking to understand the condition. 3. Students could have a platform to practise design thinking and gain information about computer science.

MODULE 4

Name	Image Representation
Objective	<ol style="list-style-type: none"> 1. To introduce image representation and pixel to the student in a fun creative way. 2. To instil a good impression of image representation to student.
Duration	30 minutes
Materials	Printed (colouring template) A4 paper, colour pencil
Questions	<p><u>Pre-test</u></p> <ol style="list-style-type: none"> 1. What is pixel? 2. How computer portray an image? 3. Why pixel is use in image representation? 4. How do you achieve better image using pixel concept? <p><u>Post-test</u></p> <ol style="list-style-type: none"> 1. What is the others method that could be use for image representation? 2. Why computer use pixel in image representation? 3. What does it mean to have more pixels? 4. Why pixels were square shaped? 5. What if the image is a coloured image?
Methodology	<ol style="list-style-type: none"> 1. Students would be taught on the concept of pixels. 2. They would be then given printed A4 papers to colour on according to the pixel number code. 3. A simple colour code will be provided at the side of the paper. 4. Upon completing, a vivid image will be formed, and the student have to take their guess on what is the image formed.
Conclusion/Outcomes	<ol style="list-style-type: none"> 1. Students will have basic understanding on how image representation works on a computer and how pixels concept was implemented. 2. Design thinking could be practise throughout the activity.

Newspaper Template

CAN YOU REALLY TEACH COMPUTER SCIENCE WITHOUT COMPUTER?

As great as the leaders of any nation are, the building blocks for the future always start with those who are young. With our current global climate that is shifting towards a more digital outlook, never has been more important for us to equip the youths with the ability to strive in a technology centred environment.



Picture 1: 'BITS WITH KIDS' logo

That is what we, a group of University Malaya students set out to do, in a program fittingly called 'Bits with Kids'. Lead by our coordinator, Dr. Azah Anir Norman, our aim was to share our knowledge as university students with school students in order pique their interest in STEM related subjects and teach them what computers were without actually using computers. Activities were originally planned to be conducted with the students of SK Bukit Lanjan, a school primarily attended by orang-orang asli.



Picture 2: Meeting with school's teachers from SK Bukit Lanjan

This was the case for the first few weeks, where even a few of our executive members have met up with teachers of SK Bukit Lanjan. But alas, not everything went as planned. Due to the Covid-19 outbreak that is still happening as of this article writing, plans needed to be changed. In order to comply with the MCO guidelines, we instead had to shift our focus towards those we can access,

which in this case are kids who are closes to us such as our relatives.

Our modules were also modified to focus more on the Computer Science aspect using everyday materials. In total, we were able to carry 4 modules, focusing on various aspects of computers, ranging from simple binary logic gates to how pixels work. We split the group into 2, those who weren't able to contact any kids easily and those who could. The first group was responsible for creating the video guidelines regarding the modules while the later are responsible for actually carrying out the activity.

Within these long yet fleeting 12 weeks, we were able to conduct this project. Even if the scope of the project had to be changed, our objectives were thankfully able to be met. During our reflection session, it is clear that our students were able to extract a lot of meaningful lessons within this project, like being able better improve their communications skills. As for our main takeaway, being able to



Picture 3: Kids are executing the module given

connect and provide something for our community was something the students could deeply appreciate and hopefully carry forward wherever they are headed in the future.

E-Certificate Template



Work Progress Report (International Students)**Social Engagement(GIG1005)
Attendance and Work Progress Report**

Name: Marsa Putri Andari, Matric no: WIE190704
(17207137/1). Work progress table:

Week	Date	Progress
6	30/04/2020	We did our first online class because of covid-19. This week we had to re-plan our activities.
7	07/05/2020	Did not have any meetings but 4 modules already set (Programming at home, A way home, Unpuzzled ASCII, Image representation).
8	14/05/2020	Executive members did a meeting with Dr. Azah, and 2 big groups were created (No kids and With kids).
9	21/05/2020	I submitted my video since I belong to No kids group. I chose to do the 'Programming at Home' module.
10	28/05/2020	My job done as on this week the focus was for the members of the With kids group to submit their videos.
11	04/06/2020	Dr. Azah conducted a meeting about peer evaluation.
12	11/06/2020	We did a WhatsApp discussion about the presentation which will be held the following week (week 13).
13	18/06/2020	This week was presentation day, each group will report their progression executing this project.

14	25/06/2020	We did not have any meetings as presentation was done in week 13.
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I have attended all the classes for the GIG1005 course, below is the signature of mine and my group leader to verify the above statement.



RAJA ALFIQ IZRIN BIN RAJA ISMAIL MOKHTAR
Director



Marsa Putri Andari
Leader
Group 5

Social Engagement (GIG1005) Attendance and Work Progress Report

NAME: SIDDAREDDY UMASREE

MATRIC NO: WIE190701 (17203483)

Work progress table:

Week	Date	Progress
6	30/04/2020	We had a google meet session with DR. Azah discussing how we will carry out the Bits with kid's project.
7	07/05/2020	Dr. Azah has explained about the division of team A and team B.
8	14/05/2020	The project development was updated. Members of team A were to form of four groups of 4 videos based on modules.
9	21/05/2020	Discussion with group members about modules what to choose. In that discussion I have chosen ASCII puzzle.
10	28/05/2020	Done with my video about ASCII puzzle for 4 mins.
11	04/06/2020	After making the video Team B was started to teach their younger siblings to learn from the video.
12	11/06/2020	Still team B was continue with their works.
13	18/06/2020	Today it was the presentation.
14	25/06/2020	End of the course . In this week we don't have class because our presentation has done last week.

I have attended all the classes for the GIG1005 course, below is the signature of mine and my

group leader to verify the above statement.

Alfiq
RAJA ALFIQ IZRIN BIN RAJA ISMAIL MOKHTAR
Director

umasree
Siddareddy. Uma Sree
Member
Group 5

Social Engagement (GIG1005) Attendance and Work Progress Report

Name: Muhammad Naufal Attala Matric no: WIE190705
(17206182). Work progress table:

Week	Date	Progress
6	30/04/2020	The first online class because of covid-19. This week we had to re-plan out the activities.
7	07/05/2020	No meetings but the 4 activities modules are already set (Programming at home, A way home, Unpuzzled ASCII, Image representation).
8	14/05/2020	Executive members did a meeting with Dr. Azah, and 2 big groups were created (No kids and with kids).
9	21/05/2020	Since I chose the group with kids. I'm starting to plan things with my sister.
10	28/05/2020	The making of the video with my younger sister.
11	04/06/2020	Conducted meeting by Dr. Azah about peer evaluation.
12	11/06/2020	Discussion about the presentation for the following week (week 13) with the other group member in WhatsApp.
13	18/06/2020	This week was presentation day for each group to report their progression to execute this project.
14	25/06/2020	No meetings as presentation was done in week 13.

I have attended all the classes for the GIG1005 course, below is the signature of mine and my group leader to verify the above statement.





Ayesha Binti Mohd Ramli
Leader Group No. 6

Muhammad Naufal Attala
Member Group No. 6

Class Attendance Form



FACULTY OF COMPUTER SCIENCE AND INFORMATION TECHNOLOGY
UNIVERSITY OF MALAYA



CLASS ATTENDANCE FORM
SEMESTER: II SESSION: 2019/2020

COURSE CODE : GIG1005 (G7 - WIE)

COURSE TITLE : SOCIAL ENGAGEMENT

LECTURE / TUTORIAL / LAB TIME : VENUE :

LECTURER'S NAME: DR. AZAH ANIR NORMAN

NO.	REG. NO.	NAME	W1	W2	W3	W4	TOTAL
1	17205740/1	LIM KANG ZHENG	✓	✓	✓	✓	
2	17203483/1	LJMA SREE SIDDAREDDY					
3	17203802/1	SOMALAKSMI A/P CHANDRASEKARAN	✓	✓		✓	
4	17173892/1	MAI HUANGRUI					
5	17137172/1	ABDUL RASHID BIN ABDUL RAZAK					
6	17207406/1	PHONG JIA WEI	✓	✓	✓	✓	
7	17204561/1	ASYRAF IKMAL BIN MUHTAR	✓	✓	✓	✓	
8	17206102/1	AHMAD WAHINAN ANWAR BIN ALIMAT @ ANUAR					
9	17204748/1	NG PHOON KEN	✓	✓	✓	✓	
10	17186649/2	IRDINA BATRISYIA BINTI ASRUL NIZAM	✓	✓	✓	✓	
11	17204385/1	MAHAEN A/L RAJENDRAN	✓	✓	✓	✓	
12	17205532/1	MAHESH RAO A/L NARASINGA RAO	✓	✓	✓	✓	
13	17204377/1	YAP GAY CHIN	✓	✓	✓	✓	
14	17204232/1	SOONG PEI CHZE	✓	✓	✓	✓	
15	17204296/1	LEE SET YAN	✓	✓	✓	✓	
16	17205165/1	AHMAD WAFIQ BIN RAMLI	✓	✓	✓	✓	
17	17207269/1	TEO RICHIE	✓	✓	✓	✓	
18	17207137/1	MARSA PUTRI ANDARI	✓	✓	✓	✓	
19	17204890/1	EYLIA NURWANI BINTI AB RAZAK	✓	✓	✓	✓	
20	17206474/1	NURUL IZZAH BINTI RAZALI	✓	✓	✓	✓	
21	17205128/1	RANIA RIJALULLAH BINTI ZOULKAFLY ALIAS MAZLAN	✓	✓	✓	✓	
22	17205360/1	NG ZI XIANG	✓	✓	✓	✓	
23	17206336/1	INTAN NUR ATIQAH BINTI AMILUDDIN					
24	17082331/2	MARDHIYYAH BINTI IBRAHIM	✓	✓	✓	✓	
25	17204945/1	HARIS HAIKAL BIN HARUN	✓	✓	✓	✓	
26	17206343/1	GAN JIA SOON	✓	✓	✓	✓	
27	17091282/2	NURATIQA BINTI HUZAINI	✓	✓	✓	✓	
28	17203302/1	LIM ZHUAN DE	✓	✓	✓	✓	
29	17206182/1	MUHAMMAD NAUFAL ATTALA					
30	17206792/1	MAISARAH BINTI MAIZUL LIZAN	✓	✓	✓	✓	
31	17068512/2	AYESHA BINTI MOHD RAMLI	✓	✓	✓	✓	
32	17202918/1	AMIRA HANEE BINTI SAIFULAZRI	✓	✓	✓	✓	
33	17203135/1	NUR AIN SAFIRAH BINTI ISMAIL	✓	✓	✓	✓	
34	17203792/1	NUR MAHIRAH BINTI MOHAMAD RAWI	✓	✓	✓	✓	
35	17176346/2	MOHAMAD NAIM AFNAN BIN MOHAMAD YUSOF	✓	✓	✓	✓	

*4 Students change their course and move to another groups

36	17131948/2	NUR 'IZZAH BINTI ABDUL GANI	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
37	17204148/1	ANIS ZULAIKHA BINTI NORIMAN	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
38	17205472/1	AHMAD AIMAN BIN RAZAK	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
39	17193796/2	NUR LIYANA MADIAH BINTI HAZIZUN	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
40	17202838/1	SEH CHIA SHIN	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
41	17202879/1	JOVI KOH WEI CHIANG	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
42	17205147/1	EMILY CHOO YU XIN	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
43	17203872/1	LIM WHEI HAN	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
44	17205417/1	VINISHAAH A/P JEYABALAN	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
45	17207528/1	AMER SYUAIB BIN UMAIR @ AZURA	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
46	17206011/1	LIM WEI YEONG	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
47	17206265/1	AHMAD HAZIQ BIN MOHD SUKOR	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
48	17180200/2	MUHAMMAD HAIKAL BIN SHARUDIN	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
49	17075611/2	MUHAMMAD SAIFUL AMRI BIN RUSZIZI	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
50	17306284/1	VIMMALAN A/L KOBU	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	



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CLASS ATTENDANCE FORM
SEMESTER: II SESSION: 2019/2020

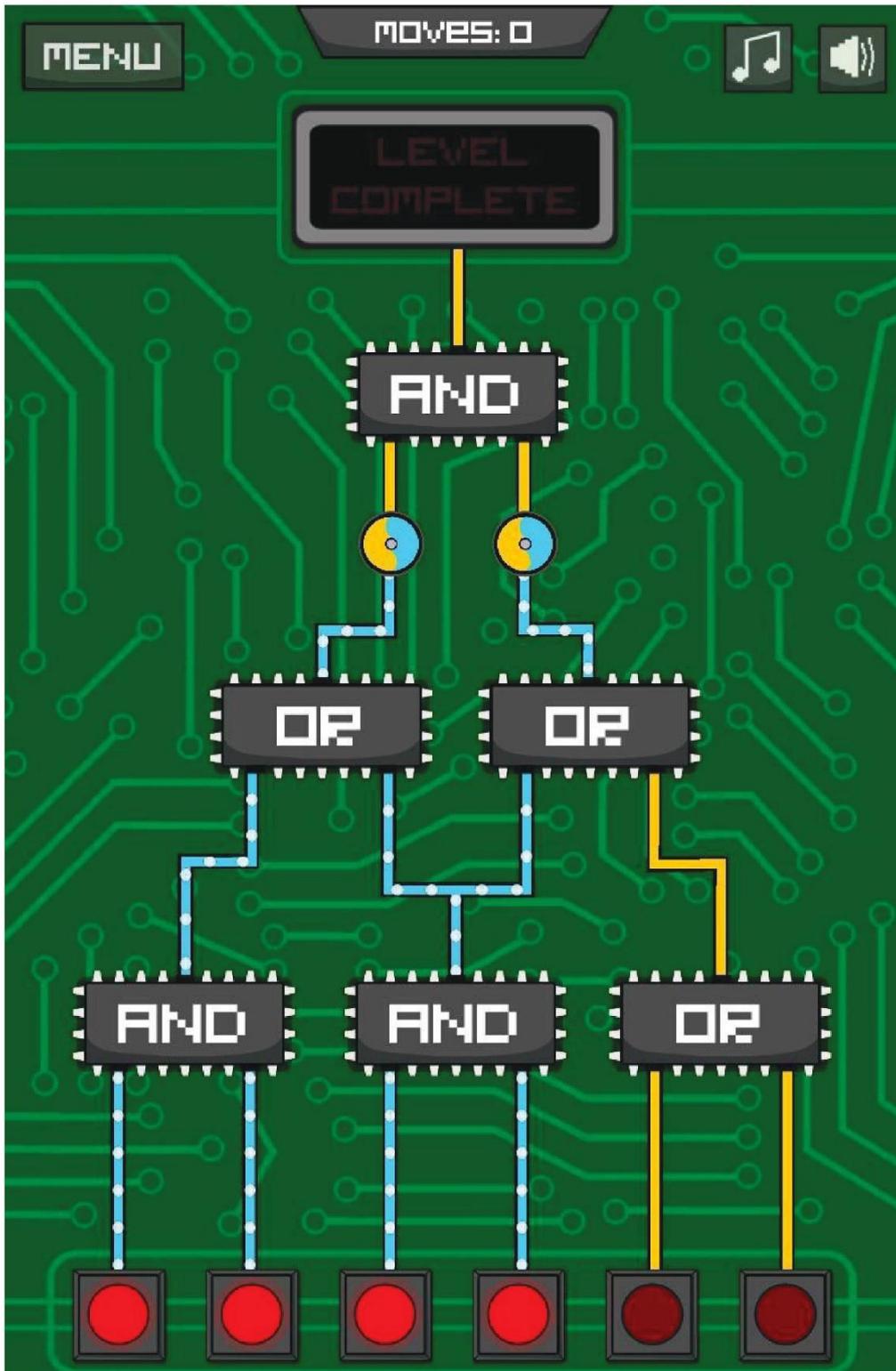
COURSE CODE : GIG1005 (G9 - WIH)
COURSE TITLE : SOCIAL ENGAGEMENT
LECTURE / TUTORIAL / LAB TIME : VENUE :

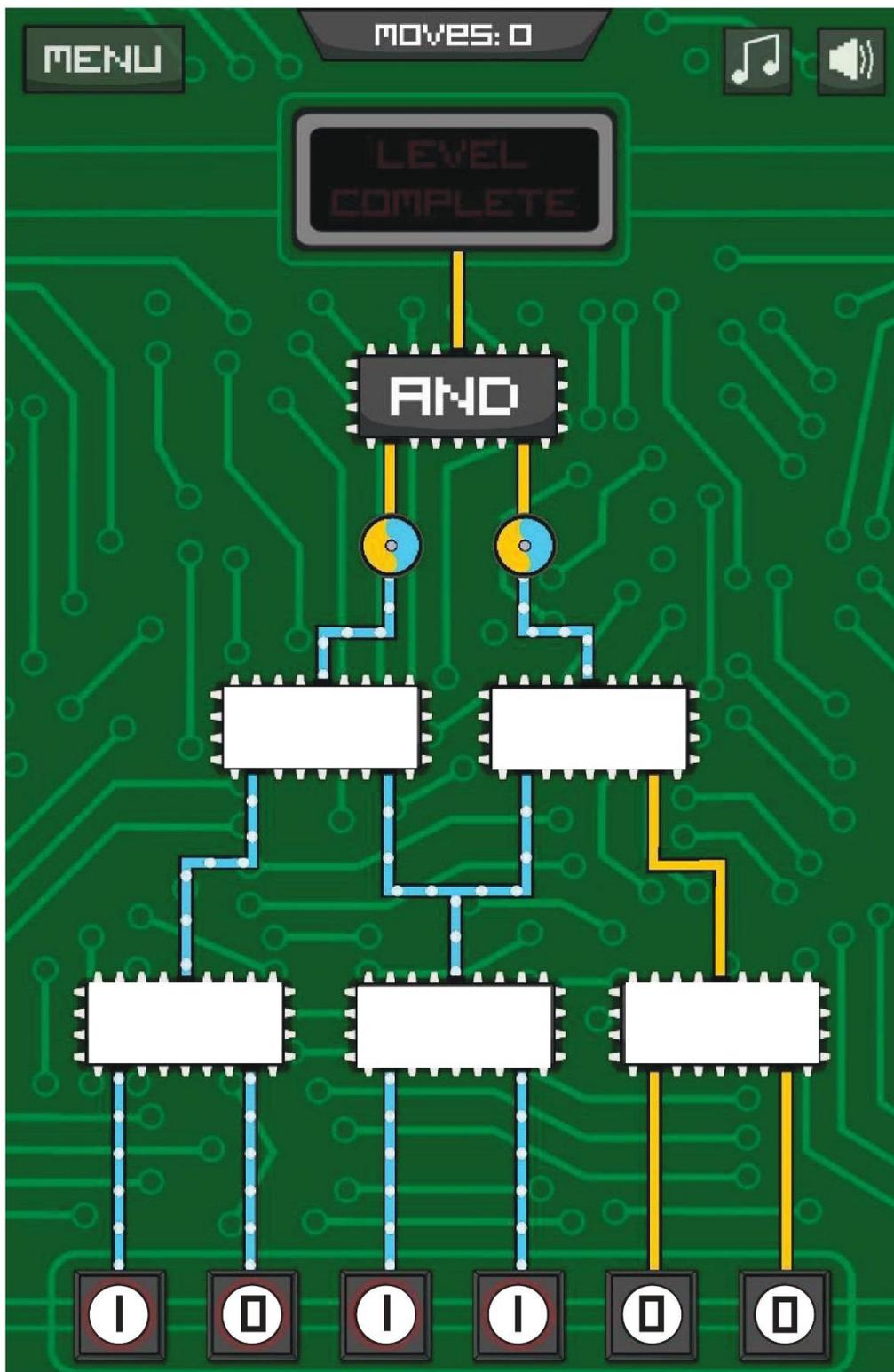
LECTURER'S NAME: DR. AZAH ANIR NORMAN

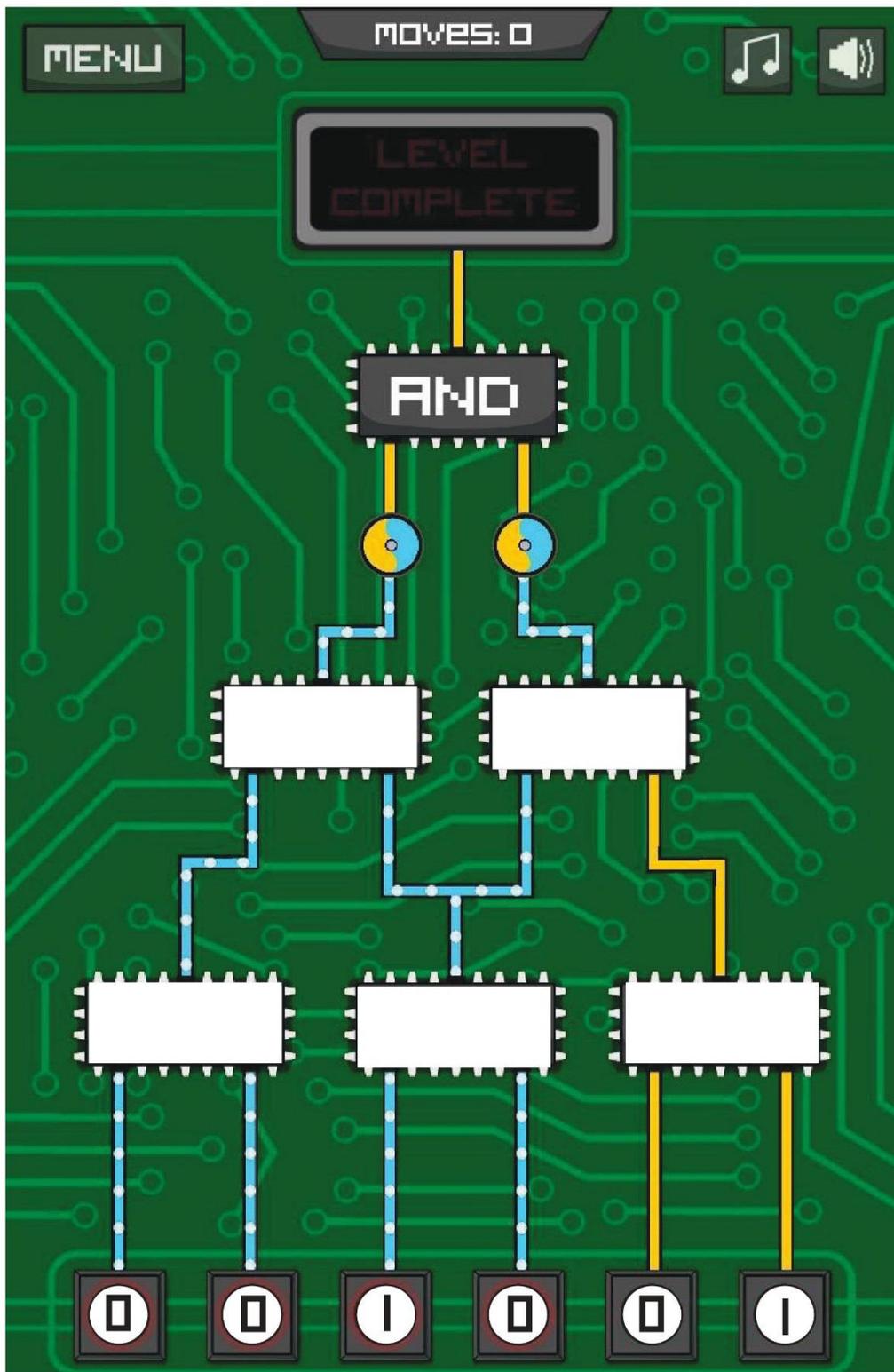
NO.	REG. NO.	NAME	W1	W2	W3	W4	TOTAL
1	17204674/1	SOO MUN CHONG	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
2	17118999/2	NURUL ASYIQIN BINTI MOHD NASIR	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
3	17206504/1	GAN JOO HAN	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
4	17203419/1	NG WEI HONG	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
5	17065980/2	MUHAMMAD EMIR RAIS BIN SHAHRIN	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
6	17202858/1	LIEW XIN YEE	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
7	17205055/1	CHAN SHI ERN	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
8	17197449/2	MOHAMMAD AFIF BIN MOHAMMAD FAUZI	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
9	17205923/1	ONG HENG KIAT	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
10	17065343/2	NURUL ASYIQIN BINTI MOHD HARMIZI	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
11	17203724/1	YEW JIN-NEE	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
12	17207044/1	LEE HONG YAN	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
13	17203090/1	KNG YIN CHEW	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
14	17207415/1	OOI HUI EN	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
15	17205866/1	WAN WOEI CHYI	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
16	17094472/2	RAJA ALFIQ IZRIN BIN RAJA ISMAIL MOKHTAR	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
17	17206541/1	ROSHNI MAGAINRAN	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
18	17133184/2	SITI AISYAH BINTI ABD RAZAK	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
19	17203899/1	NUR ANIS SHAFIQAH BINTI NORLIZA	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
20	17104918/2	NUR-AZYANI FARHI BINTI ZULKIFLI	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
21	17077341/2	MUHAMMAD IQMAL HAFIY BIN HAMDI	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
22	17162082/2	IZZ ZULFA BINTI MUHAMAD KHANAFI	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
23	17206299/1	KOH LI YANG	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	

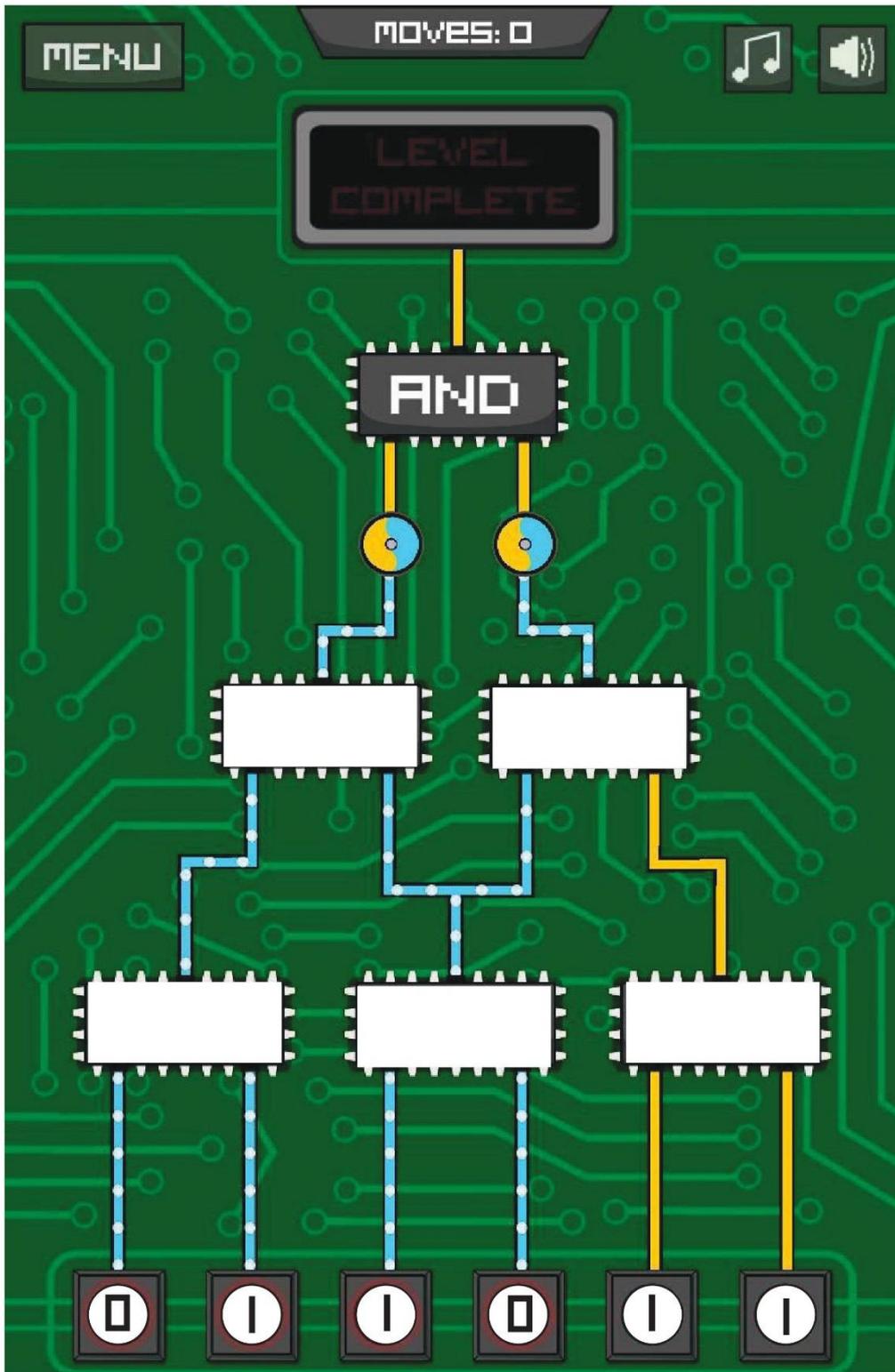
Modules Template

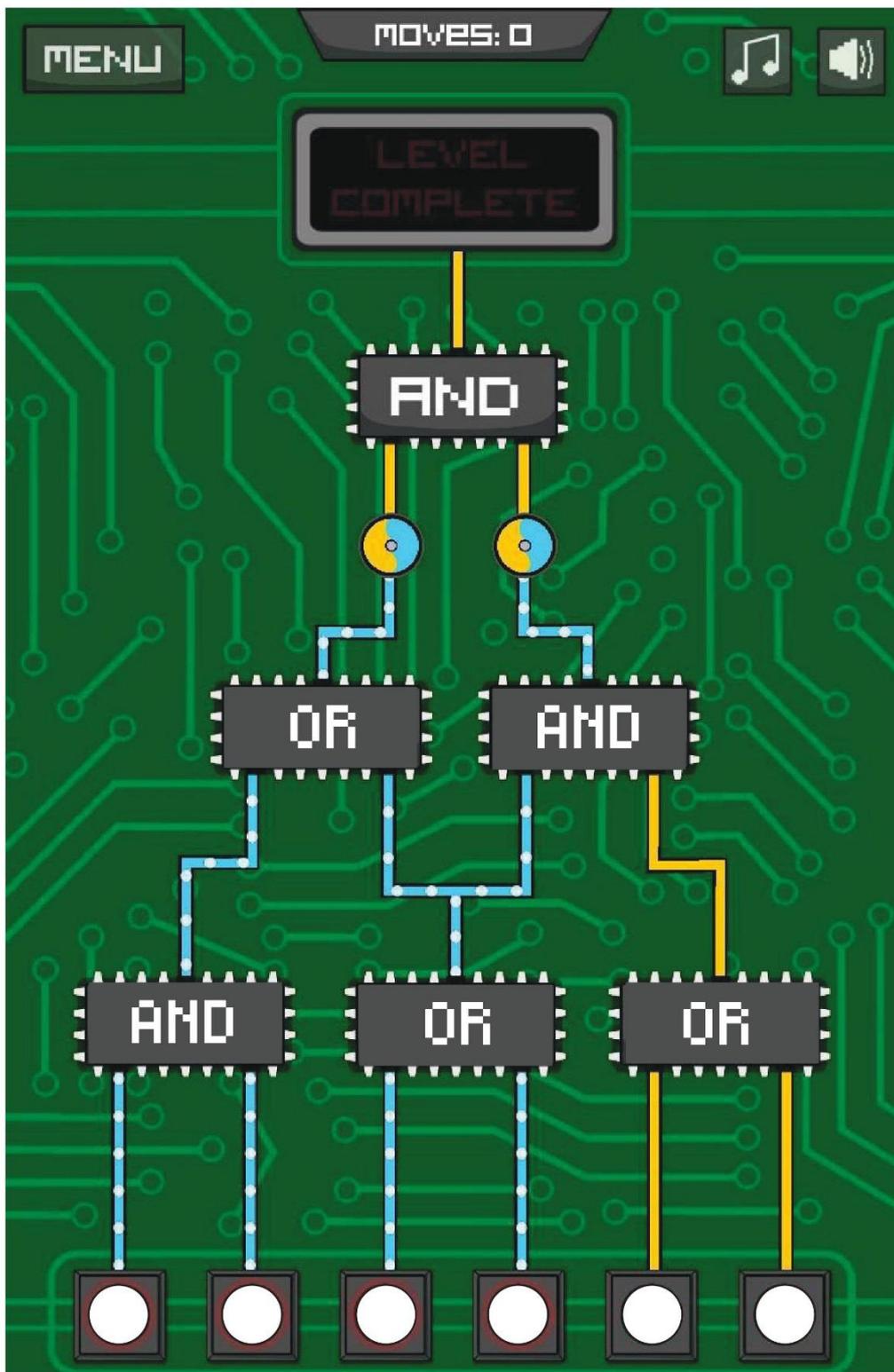
Module 1: 'A WAY OUT'

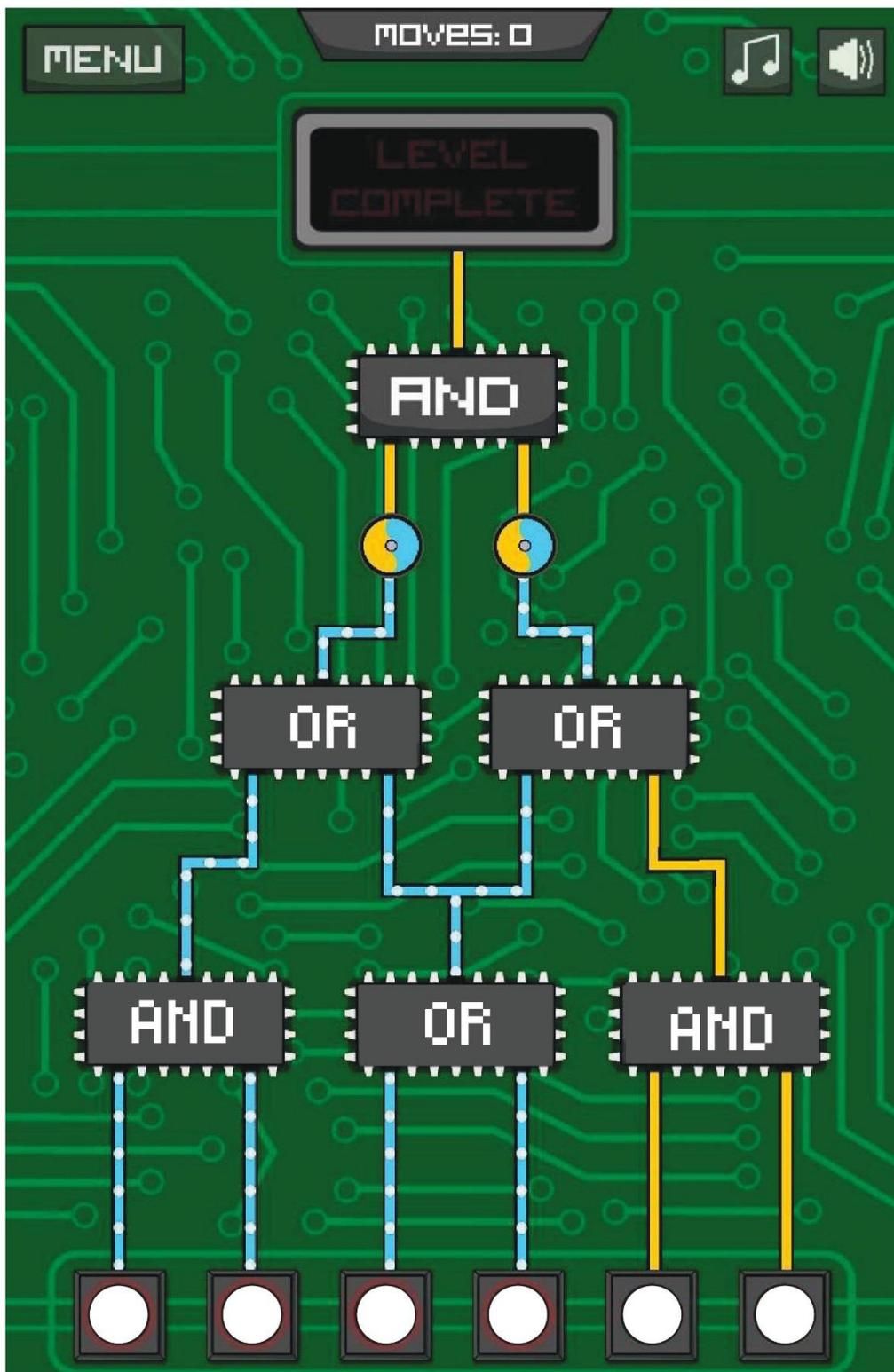






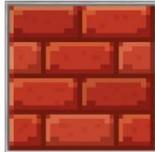
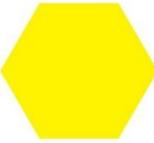






Module 2: 'PROGRAMMING AT HOME'

PROGRAMMING AT HOME

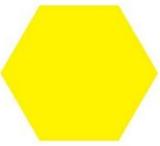
YOUR INSTRUCTIONS :

GUIDES :

- 1
FORWARD
- 2
90 DEGREE LEFT
- 3
90 DEGREE RIGHT



PROGRAMMING AT HOME

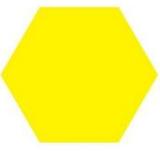
YOUR INSTRUCTIONS :

GUIDES :

- 1 FORWARD
- 2 90 DEGREE LEFT
- 3 90 DEGREE RIGHT



PROGRAMMING AT HOME

YOUR INSTRUCTIONS :

GUIDES :

1 FORWARD

2 90 DEGREE LEFT

3 90 DEGREE RIGHT

 **START**

 **GOAL**



Module 3: 'UNPUZZLED ASCII'

ASCII - BINARY CHARACTER TABLE

Letter	ASCII Code	Binary
A	065	01000001
B	066	01000010
C	067	01000011
D	068	01000100
E	069	01000101
F	070	01000110
G	071	01000111
H	072	01001000
I	073	01001001
J	074	01001010
K	075	01001011
L	076	01001100
M	077	01001101
N	078	01001110
O	079	01001111
P	080	01010000
Q	081	01010001
R	082	01010010
S	083	01010011
T	084	01010100
U	085	01010101
V	086	01010110
W	087	01010111
X	088	01011000
Y	089	01011001
Z	090	01011010

UNPUZZLED ASCII

073

065077

065

066069065085084073070070085076

083079085076

UNPUZZLED ASCII

065076087065089083

083069069075

070079082

075078079087076069068071069

UNPUZZLED ASCII

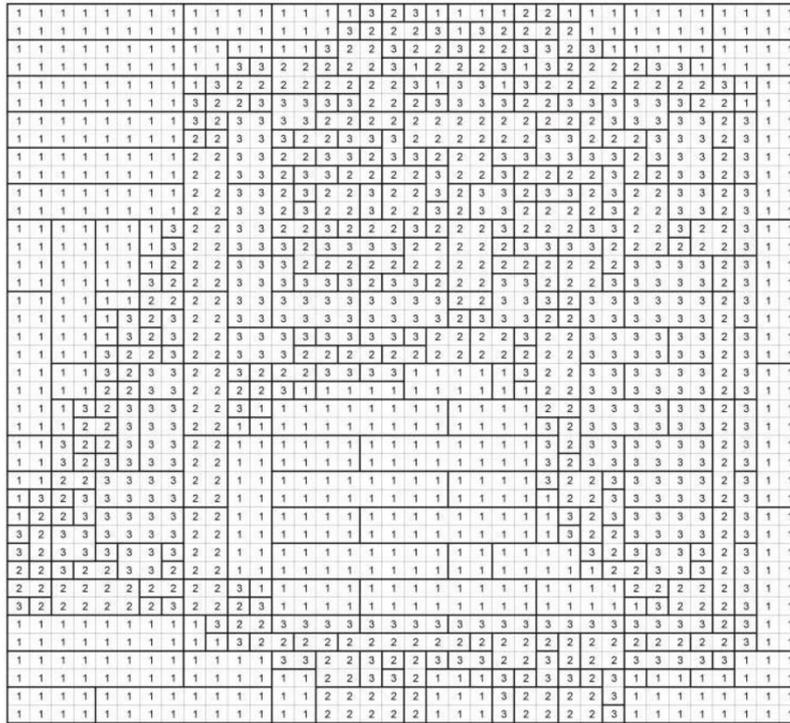
067079077080085084069082

083067073069078067069

073083

070085078

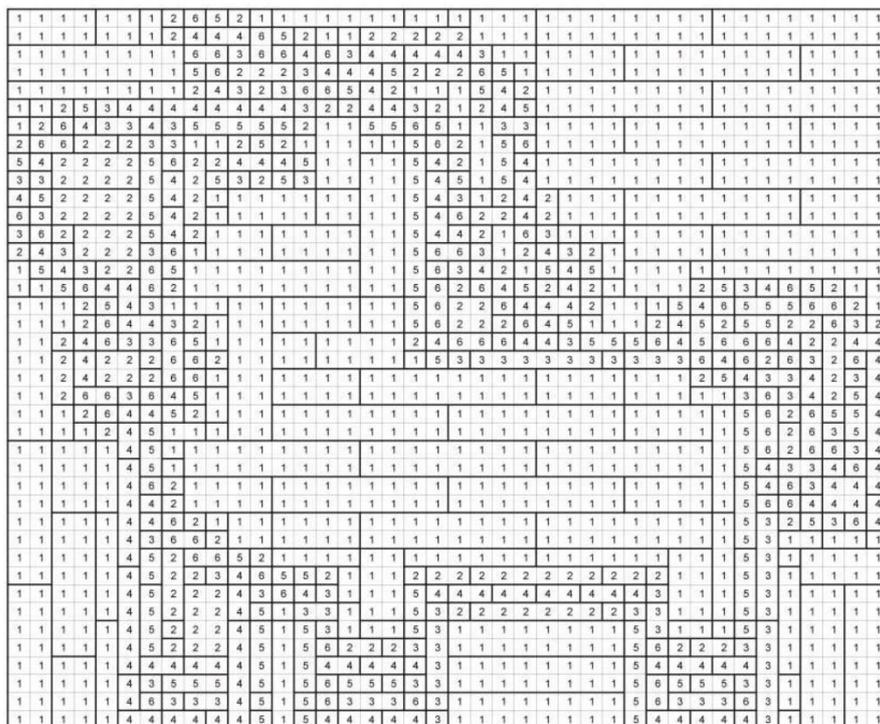
Module 4: 'IMAGE REPRESENTATION'



Colour codes	
1	White
2	Brown
3	Light Blue

What did you find?

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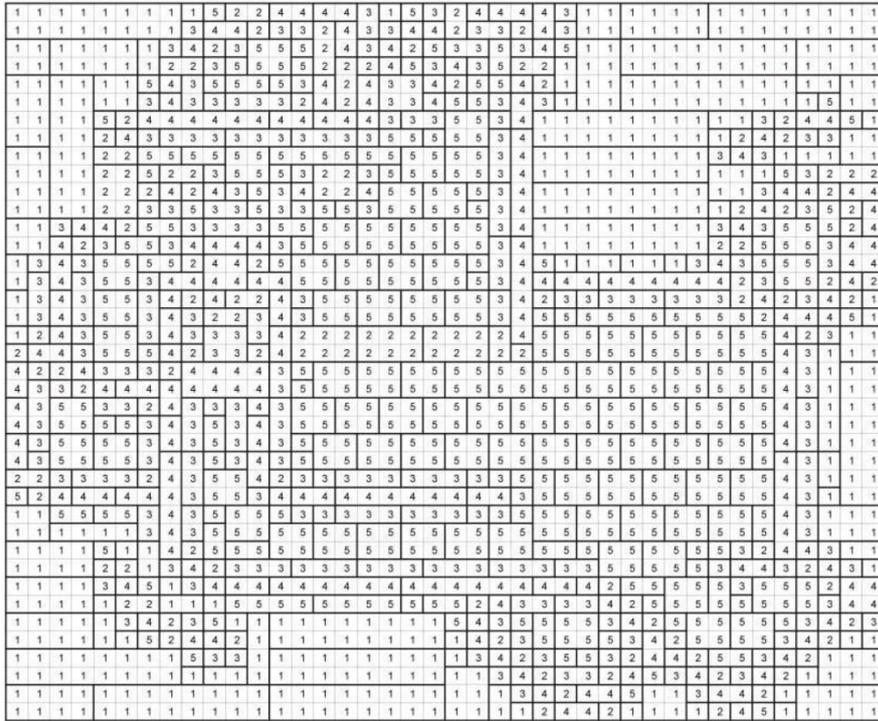


Colour codes	
1	White
2	Light Blush Gray
3	Dark Gray
4	Brown
5	Olive Green
6	Green

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Colour codes	
1	White
2	Dark Gray
3	Dark Bluish Gray
4	Brown
5	Light Yellow

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