



WIX 2001

Thinking and Communication Skills

SULAM Project Final Report

Session 2021/2022

Group Member:

No.	Name	Matric Number
1.	Adriana Sofea Binti Ahmad Suhaimi	U2005278
2.	Muhammad Fahmi Hafiz Bin Rozi	U2005299
3.	Ng Qi Ding	S2035398
4.	Lim Hong Zhi	U2005401
5.	Che Sin Khai	U2005281
6.	Tang Yean Ho	U2005291

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Introduction

Our SULAM project, Java Rangers, aimed to strengthen the fundamentals of the University of Malaya (UM) students, especially the first-year Faculty of Computer Science and Information Technology (FCSIT) students in Java programming through a 4-day virtual Java workshop covering all topics of the subject, WIX1002 Fundamental of Programming. This idea was initiated after ideation and discussion among the group members, as we had been through the struggles of our juniors, the first-year FCSIT students. We decided to lend a helping hand to those in need to catch up with the complicated yet fast-paced online programming lectures. This project contributed to solidifying the fundamentals of Java programming of the first-year FCSIT students via detailed, step-by-step guided practises to hone their skills through first-hand experience.

The team had decided to collaborate with Persatuan Komputer UM (PEKOM) for our SULAM project. PEKOM is a student body association registered under the Student Affairs Division (BHEP). PEKOM is a well-recognized association actively collaborating with the FCSIT in organising academic, computing and IT-related programs for UM undergraduates. We believe forming a collaboration with PEKOM will ensure the program's quality and trustworthiness, allowing us to gain more participants joining the Java workshop. Moreover, PEKOM helped us promote the project on Instagram, generating more awareness and establishing a presence among UM students. Lastly, PEKOM monitored our lecture sessions and evaluated each conducted session. The feedback and opinions served as a valuable resource to reflect on. Continuous improvement was the key to ensuring professionalism and maintaining our lecture quality.

The primary target audience for our Java programming workshop was the first-year undergraduates from the FCSIT. The program equipped participants with supplementary knowledge and content to help grasp the syllabus of the module WIX1002 Fundamentals of Programming. However, undergraduates of every age, faculty and culture were welcome as long as they are passionate and enthusiastic about learning Java programming. Our team aimed to have at least 30 participants throughout the four live lectures and tutorial sessions. We decided to be of their assistance as we deeply empathise with their struggles. As second-year undergraduates, we went through the daunting lessons and rigorous exams without any assistance. The heartfelt helplessness and despair back then motivated us to help the said group deal with the sheer difficulty of Java programming.

Our team conducted four sessions respectively on 8, 9 and 15, 16 of January 2022, from 9 a.m. to 11 a.m. each day. Due to the rampaging COVID-19 pandemic, our team had no choice but to resort to the online mode. We conducted the virtual event entirely online via Microsoft Teams.

The first activity of our workshop was a simple quiz to evaluate the participants on their levels of understanding from the previous classes or lectures. The 15-minutes quiz consisted of MCQs along with fill-in-the-blanks. The main activity involved three experts in the course syllabus, taking turns presenting a one-hour lecture session on Java programming. The facilitators also served as tutors whenever they are not in charge of the session. The lecture content was modified and decided upon receiving survey forms on the participants' desired topic to master the Java language. The main event also consisted of a one-hour lab and Q&A session to help the students familiarise themselves with Java practice sets and clarify academic confusion. At the end of the last day of our workshop, we hosted a final quiz to observe their progressions in contrast to the previous performance. While measuring our workshop's significance, we asked the participants to fill in a survey form to collect comments and recommendations.

The COVID-19 pandemic induced the implementation of the Movement Control Order (MCO). As a result, the undergraduates could not attend physical classes. Commencing with a brand new learning method where interactions with lecturers are scarce, many admitted they had a hard time adjusting. They shouldered a heavy responsibility, the five-credit-hour module, WIX1002 Fundamentals of Programming. Messing up the grade of the said subject would cause severe implications on the student's CGPA. Not to mention that a lot of the undergraduates originated from non-computing backgrounds. In other words, they had to construct their foundation while suffering through the trying times. When we interviewed selected target users, we were disheartened to find out that they only barely get by. They demonstrated the desperate need for external help and assistance. The understanding gap snowballed and was getting out of control. The dire situation was the primary driver pushing us to be the seniors we needed back then. The circumstance also induced anxiety and depression of not catching up with the lessons. Being suffocated with the pressure, many reported mental health issues such as irritability, nervousness and even fear of learning. Being on edge, they were so concerned regarding their studies that they all positively responded when we mentioned our proposed solution. To ensure the exhaustive addressing of their problems, we ideated and brainstormed using various idea-inducing tools

and templates. For instance, we identified their major problem by drafting personal canvas, empathy maps and HMW templates. We also held a deep conversation with our collaborator, PEKOM, collecting their point-of-views and aligning our solutions with their perspectives. Once we defined the issues, the resolution began with an Ideation Sprint to meticulously generate answers to their needs. Students did not frequently interact with coursemates due to the virtual distant learning. The handicap again impacted their education because discussions and study groups were few. Furthermore, many faced inevitable technical issues such as bad networks and non-functional video and audio devices. By providing a supportive learning medium, our content served as supplementary to fill the void within their understanding. Through analysing the raw feedback provided by the target users, we decided that project execution is impactful and beneficial. The implementation proved to be effective for the first-year FSKTM undergraduates by providing utterly craved workshop sessions in a way that is the most convenient.

By the end of this project, the students determined that our lecture was practical as 80% of students who submitted the survey form understood the content. Besides, we witnessed improvement in students' understanding of JAVA programming by the end of the workshop, where the score of a students' post quiz improved by at least one grade from the pre-quiz results. Moreover, the students obtained confidence in participating in a professional workshop, allowing them to challenge themselves, identify their limits and make improvements. More than half of the attendees voted as they are willing to participate in programming competitions in the future in the survey form distributed at the end of the project. For our group, we gained experience by collaborating with PEKOM. It was a golden opportunity for us since some previously never organised a workshop with a party. We had a better idea of executing an online project smoothly while everyone amid the MCO and Covid-19 pandemic. We also strengthened our programming skills via revision of the previous lessons.

Fulfilment of Project's Objectives

No.	Objectives	Outcomes
1	To assist and tutor first-year undergraduate students on JAVA programming in two weeks.	<p>A JAVA workshop has been successfully conducted with a total of 35 participants registered including those who have zero basics of JAVA.</p> <p>Through the result from the feedback form which we distributed at the end of our last session, we have met this objective by observing that all of the participants have claimed that they have increased their knowledge about JAVA after joining our workshop. Most of them are satisfied with our teaching mode and are able to understand what we have covered in the four classes within two weeks. This can be shown by the result from the feedback form as most of them are rated for 4 and above for this question.</p>
2	To help the first-year undergraduate students revise on the programming topics before they face their final examination.	<p>To test the achievement for this objective, we have distributed the pre-quiz before the starting of our workshop and also a post-quiz after our workshop has reached the end to test their improvement. The questions prepared are the same for both of these quizzes as we have to ensure the level of difficulties is consistent.</p> <p>From the comparison of our participants' pre and post quizzes results, we observe that most of our participants have great improvement in increasing at least one grade.</p>

3	To conduct a JAVA workshop in the most effective way.	<p>This objective is tested by expecting at least 5 participants to answer on the ad hoc questions asked by us throughout the lecture session.</p> <p>However, unfortunately this objective is not fully met. It is because the phenomenon of having silent classes is common when they are held online. People feel more comfortable hiding behind the screen. Our participants are too shy to turn on their microphone and respond to us but there are still one or two students who have shown their participation in asking questions.</p>
4	To gain more experience in conducting a workshop through a collaboration with Persatuan Komputer UM (PEKOM)	<p>After deciding on the event that the team will be doing, we immediately approached PEKOM club to invite them to collaborate with us.</p> <p>After a few back and forth discussions and emails on what we expect of the collaboration, as well as providing a complete proposal to PEKOM, we successfully received a signed approval from the president of the club. This officialised the collaboration between our team and PEKOM.</p>

Activities Conducted

Our team has decided to conduct a Java Workshop to help Universiti Malaya's first-year FSKTM students gain more understanding of Java programming to ace their final exam in Foundation of Programming. To make our workshop more trustworthy, the first activity we did is to secure a reliable collaborator. We have sent out a collaboration invitation email to PEKOM. We decided to approach PEKOM because the association is a well-recognised organisation in UM which is active in managing IT-related programs. We have to prepare an event proposal for PEKOM before they accept our collaboration invitation. In the proposal, we have explained to PEKOM about the information and details of the planning and execution of this event. Finally, PEKOM accepted our invitation to be our event's collaborator.

After securing PEKOM as our collaborator, we had an interview session with PEKOM to find out what they think about the current situation of students studying java programming online due to the COVID-19 pandemic, what complaints do they often hear from students studying java programming, what they see after every event they conducted and what is their recommendation to students learning java programming. After the interview session, we had created an empathy map to analyse the needs for our event.

Beside interviewing PEKOM, each of us did interview with one of our target audience, the first-year Computer Science student in University Malaya to find out what help they need in java programming, what they think of current study situation, what complain they hear from friends, what they observe around them and what they do to improve on java programming. After the interview, each of us has created one empathy map and one personal canva for our own interviewee to analyse their needs.

After we have defined the problems and the needs for our event, we have used the information from the empathy maps and personal canvas we created to create a wall of ideas. From the wall of ideas, we tried to find the main objectives of our events and voted out the biggest problems which was "First-year students are unable to follow Java programming". With this problem statement as the main direction of our event, we further discussed and planned for the future activities.

To promote our event, we have designed 3 attractive posters and it is posted in PEKOM instagram page on 19 December 2021, the day we start to accept registration of participants. The posters include details of our events, a QR Code and a registration link. We have created a Google Form to record the details of the registered participants. The main purpose of this registration form is to keep participants' contact information and to keep track of the number of participants that will join our event. Besides just relying on the PEKOM instagram page, we did broadcast the posters and details of our events through several WhatsApp groups. This is to ensure that our event will reach out to more audiences and make our event a successful one.

We had a project monitoring presentation on 4 January 2022 for our lecturer, Dr Unaizah Hanum Binti Obaidillah to review the progress of our event. We have to prepare a prototype of our event to be presented on that day. Our group decided to use a role-playing method to showcase our event prototype. Our group has made a role-playing video showing the overview of the whole process of our event. The overview of our event process was a good one. However, our initial plan of covering all topics of the subject Fundamental of Programming (FOP) was not recommended by Dr Unaizah as she dont think that we are able to cover all topics in our 4 sessions 2 hours Java workshop and she did provide us few recommendations on how to conduct the events.

After hearing from Dr Unaizah's comments, our group had a meeting to discuss the change of plan. We have changed our initial plan to just focus on certain topics that most students are struggling with. In order to determine the topics that students are struggling with, we have distributed a survey form to all the participants to find out their understanding for each topic in FOP.

Based on the result of the survey form, we finalised the topics that we are going to teach, which is Array, Methods, File I/O and OOP. Then, we start to prepare the lecture slides and lab questions for the selected topics. Before the first session of our Java workshop, we distributed a pre quiz to all the participants to find out how much they understood the selected topics before joining our event.

Our event is on 8,9, 15 and 16 January 2022, from 9am to 11am each day, conducted on Microsoft team. Before the first session of our event, we have created a team channel and invited all participants to join the channel. Every session will be conducted by one facilitator to present a one hour lecture on that day's topic and one hour lab and Q&A session.

The first session of our Java workshop is handled by Tang Yean Ho to teach on Array, second session is handled by Ng Qi Ding to teach on Methods and File I/O, third session handled by Lim Hong Zhi to teach on OOP and the final day is handled by the three facilitators to discuss on past year FOP examination questions. Every session was recorded and saved in the team channels, so that any participant that missed the live sessions were able to watch the recording and learn from there.

At the end of our Java workshop, we distributed a post quiz to all the participants to find out how much our workshop has helped them in understanding the topics we taught by observing the improvement in students' scores compared to the previous quiz. Beside distributing the post quiz, we have sent another survey form to them to collect feedback for our workshop. The final activity of our event is to upload all teaching materials including the lecture slides and the lab questions and solutions into the team channel. By doing so, students are able to refer back to the materials anytime they want.

Photos of our activities



Proposal

Java Workshop: Fundamentals of Programming

Date

8-9 January 2022 (Saturday & Sunday)
15-16 January 2022 (Saturday & Sunday)

Time

9:00 a.m. – 11:00 a.m.

Venue

Microsoft Teams

Photo 1: Event proposal for PEKOM



Photo 2: Interview with PEKOM

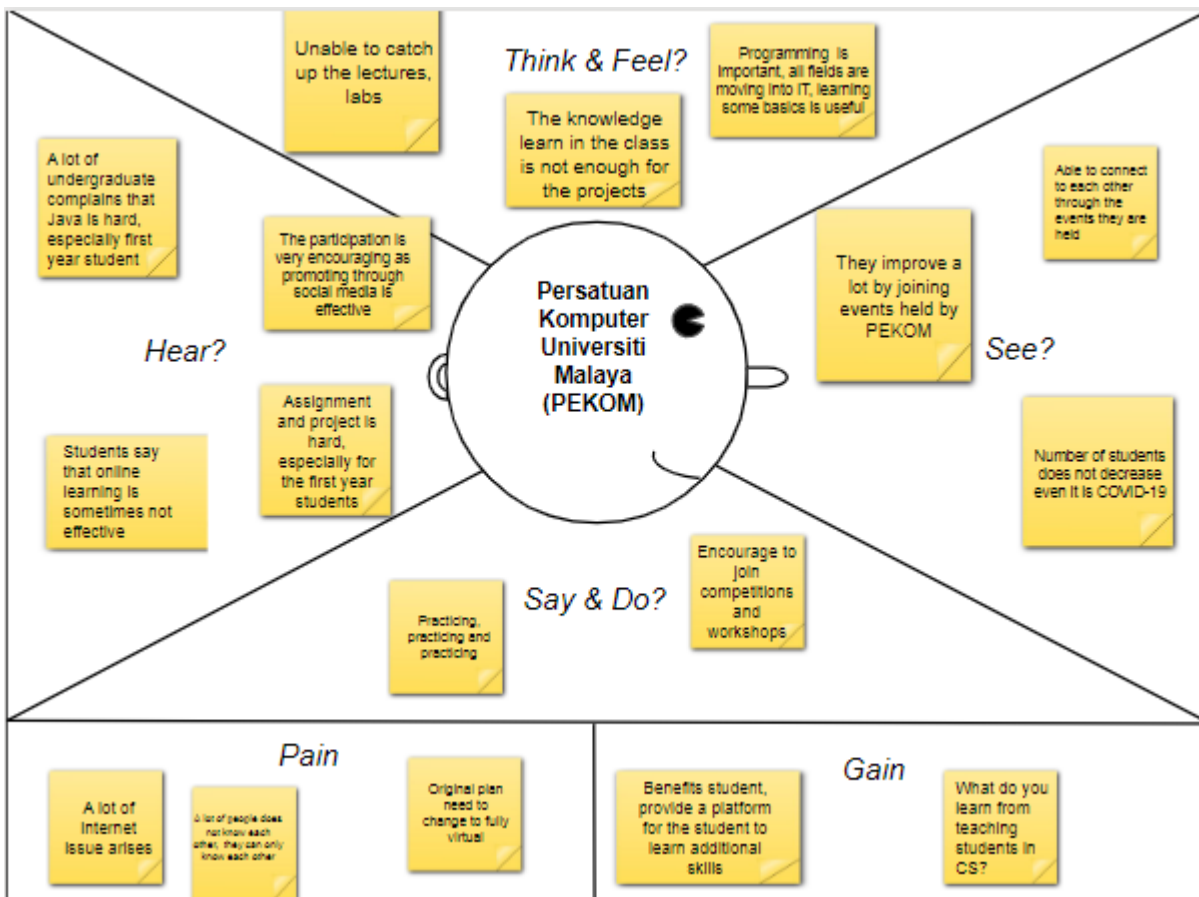


Photo 3: Empathy map of PEKOM

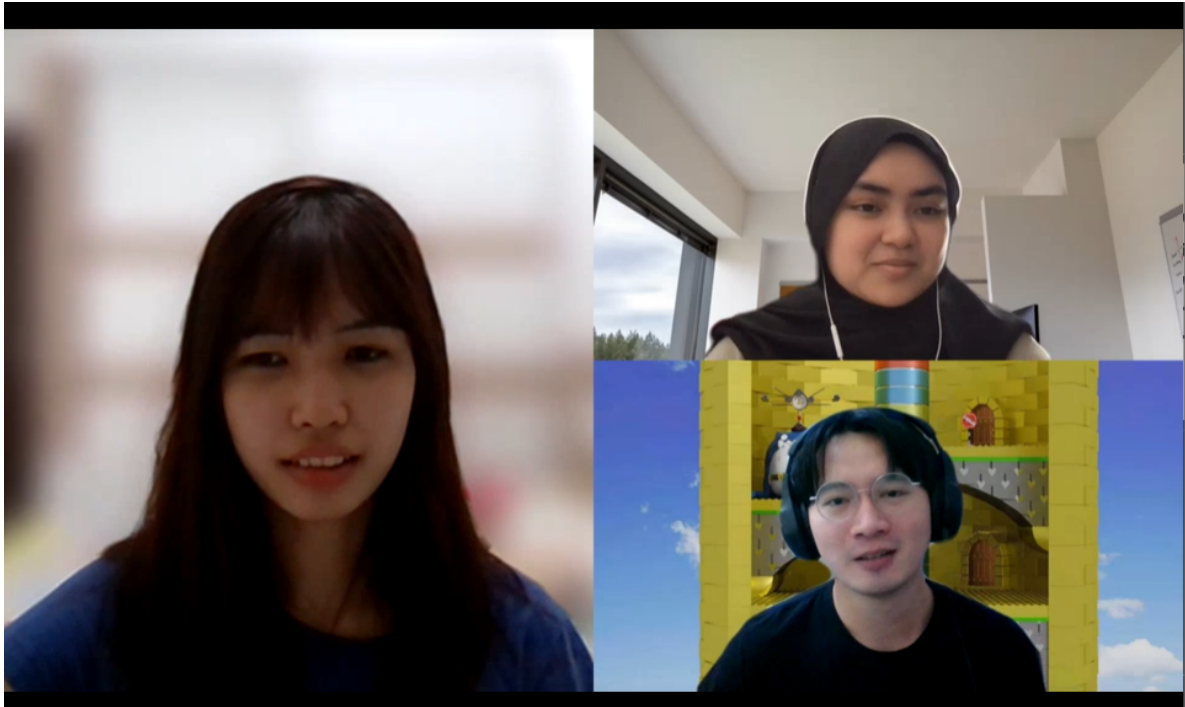


Photo 4: Interview with target audience

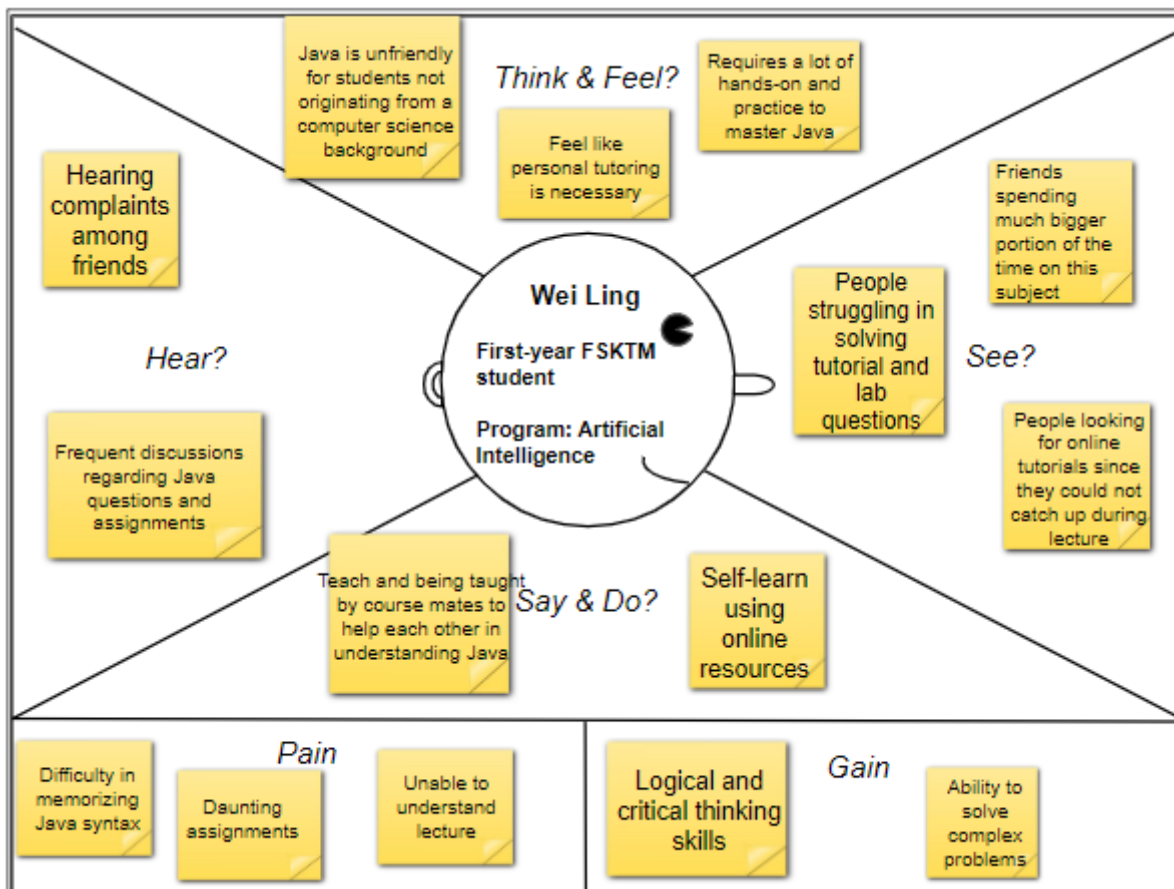


Photo 5: Empathy map of target audience

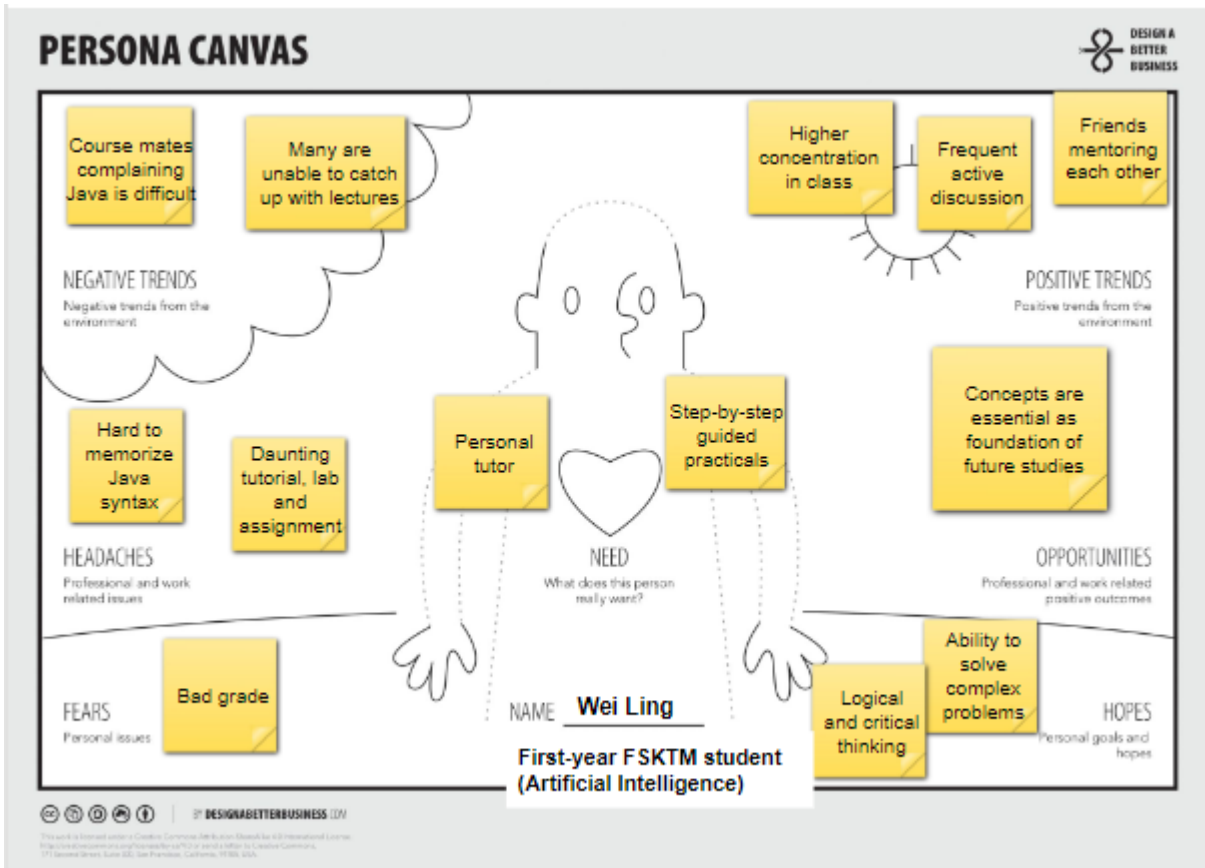


Photo 6: Personal canvas of target audience

Vote for the biggest problems

⌚ 3 min

Copy & Paste sticky notes from slide 10 & vote

- Insufficient time (1 blue dot, 1 yellow dot)
- Steep learning curve
- No relevant background or knowledge foundation (1 red dot, 1 yellow dot)
- Lack of interesting learning method
- Unable to identify self-weakness
- Students are not able to understand Java (1 green dot, 1 red dot, 1 yellow dot)
- Stress
- Hard to debug due to being inexperienced
- Occupied with other assignments (1 yellow dot, 1 green dot)
- Lack of friends to form study groups and discussions

Legend:

- Vote (Yellow)
- Copy & Paste (Blue)
- Voting Dots (Green)

Photo 7: Vote for biggest problem in HMW

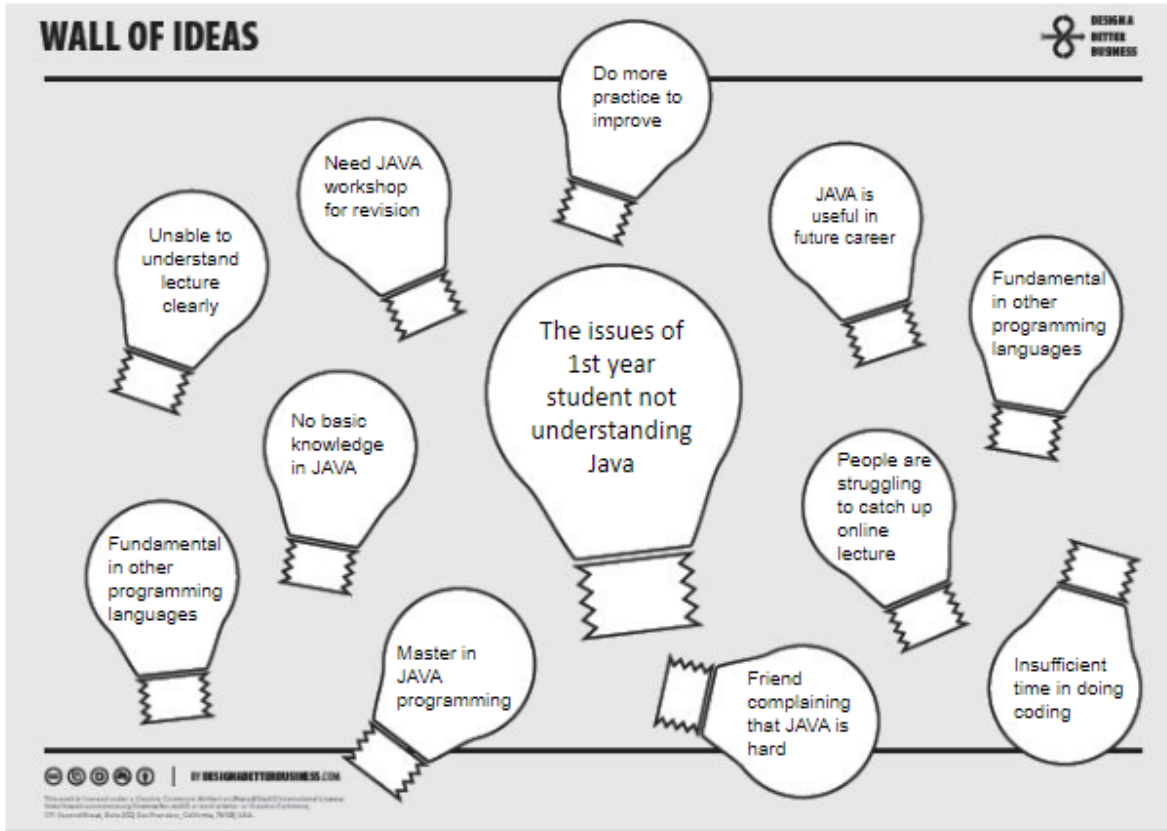


Photo 8: Wall of Ideas



Photo 9: Poster page 1 in PEKOM Instagram page

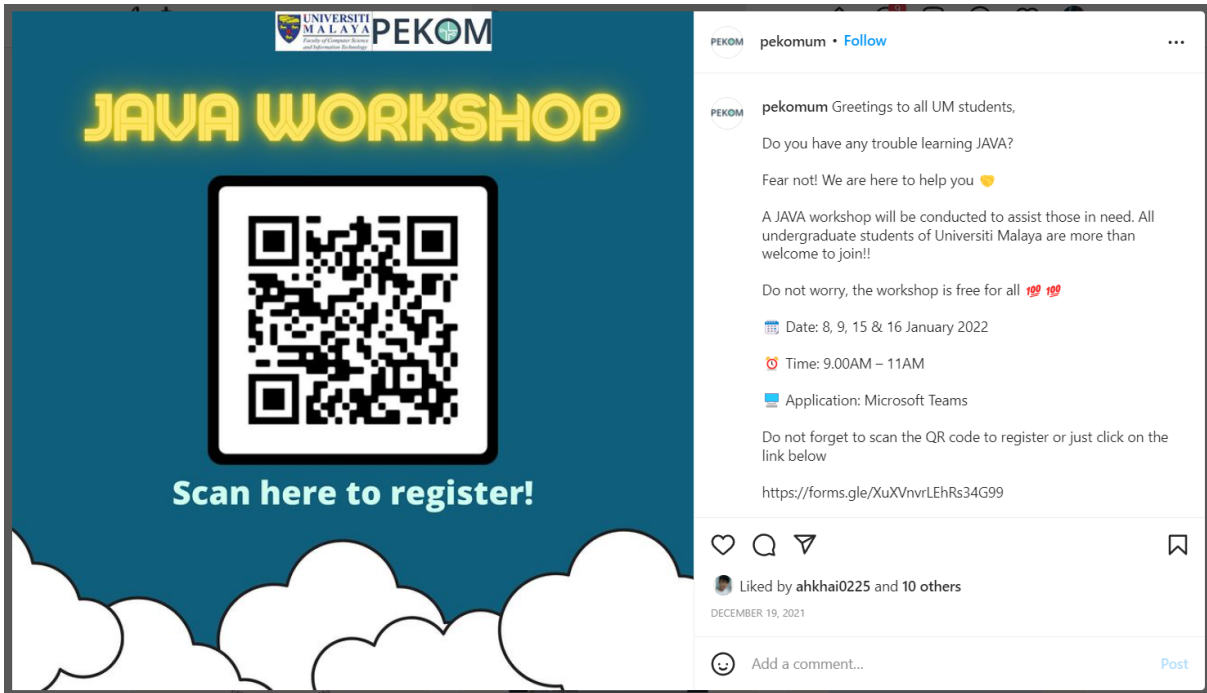


Photo 10: Poster page 2 in PEKOM Instagram page

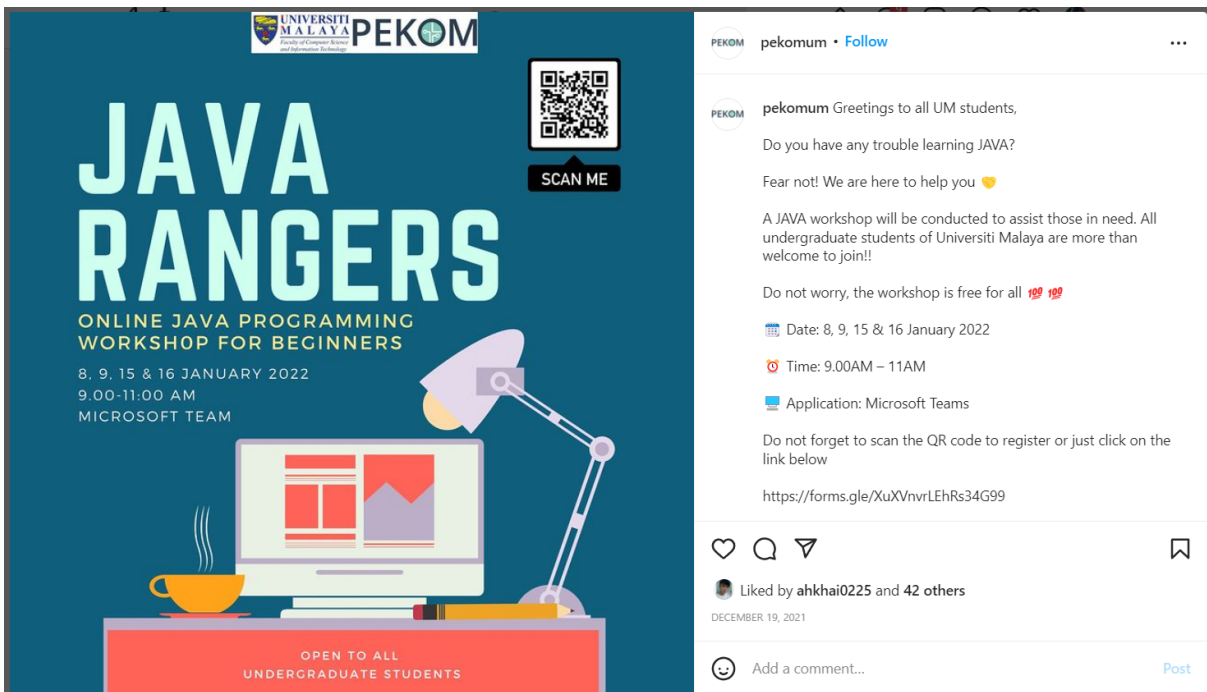


Photo 11: Poster page 3 in PEKOM Instagram page

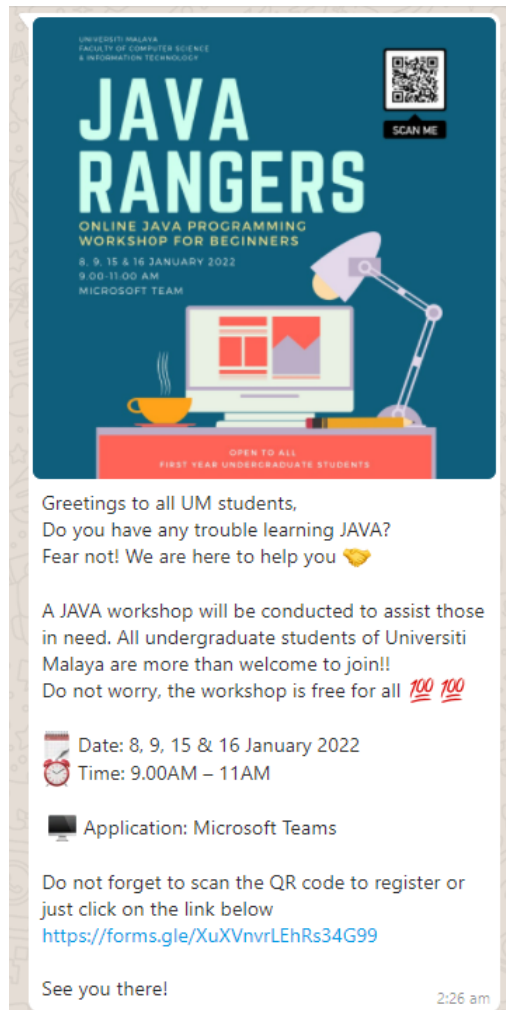


Photo 12: Promoting workshop through WhatsApp

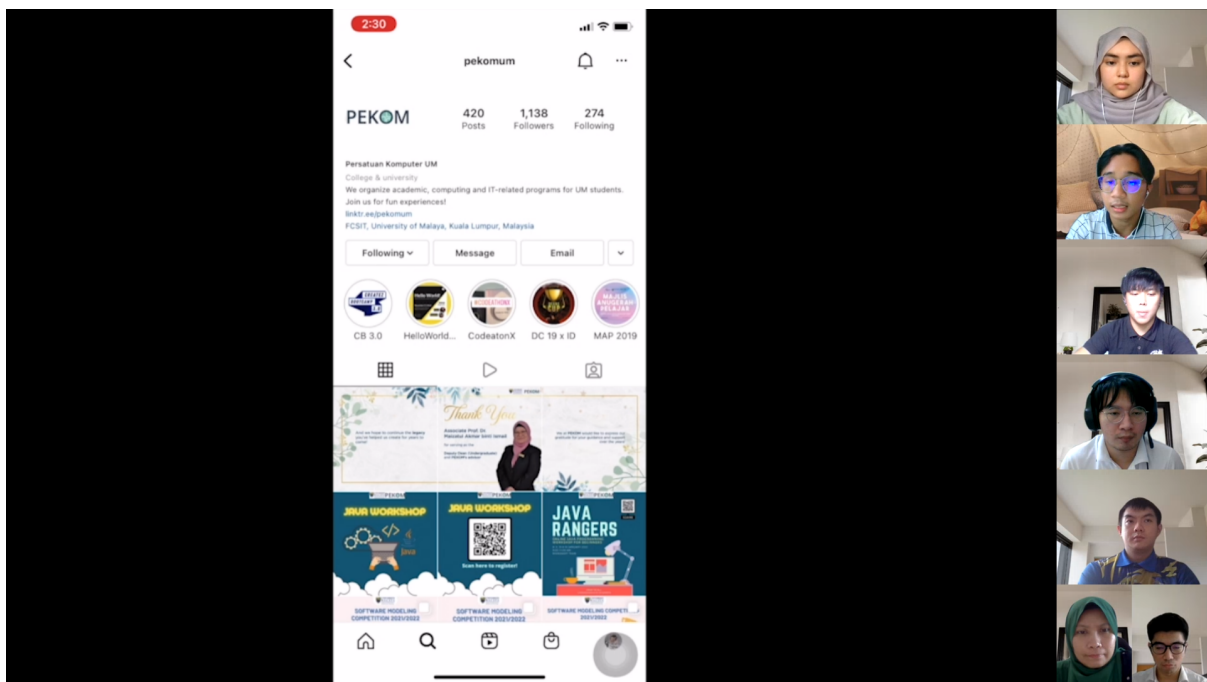




Photo 13: Project monitoring presentation

WIX1002 Foundation of Programming: How Much Do You Understand?

We are a group of second year undergraduate students from Faculty of Computer Science and Information Technology (FSKTM), University of Malaya. We are currently conducting this survey to gather data on how much FSKTM students who are taking the WIX1002 course, Foundation of Programming understand the topics.

All data collected through this survey will be kept confidential and be used for research purpose only. Thank you

 yeanho1002@gmail.com (not shared) [Switch accounts](#)  Draft restored

***Required**

Gender *

Female

Male

Department *

Computer System and Network

Software Engineering

Artificial Intelligence

Data Science

Information System

Multimedia

Photo 14: Survey form to check on participant understanding for each topic



JAVA programming Pretest: Knowledge Testing

Greetings!

Before attending Java Rangers, we require you to take a pre-quiz before the session to gauge your understanding on the topics and to see whether our event has improved your understanding of Java. You may take it whenever you want as long as it is done before our first session.

We request that you take this quiz without cheating to ensure we fully capture your understanding on Java.

Good luck and have fun! \ (^ o ^) 人 (^ o ^) /

 u2005278@siswa.um.edu.my (not shared) [Switch account](#) 

*** Required**

Matrics number *

Your answer _____

Faculty *

Photo 15: Java programming Pre-test

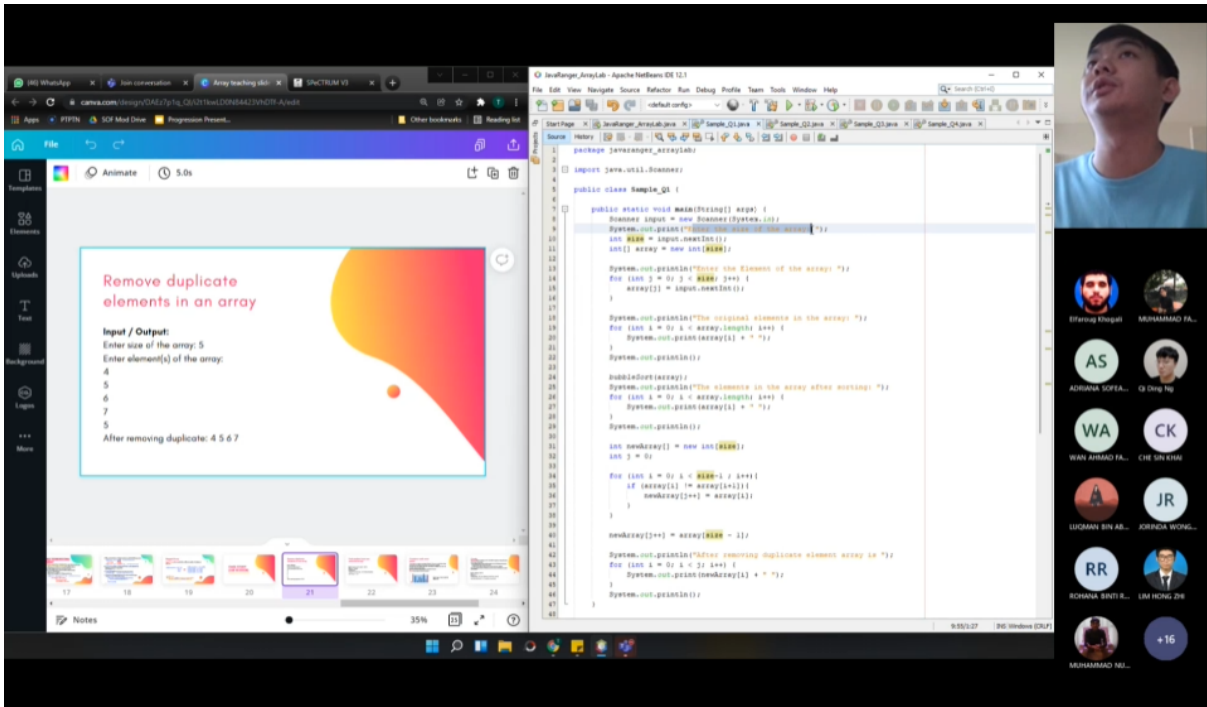


Photo 16: First session of Java Workshop

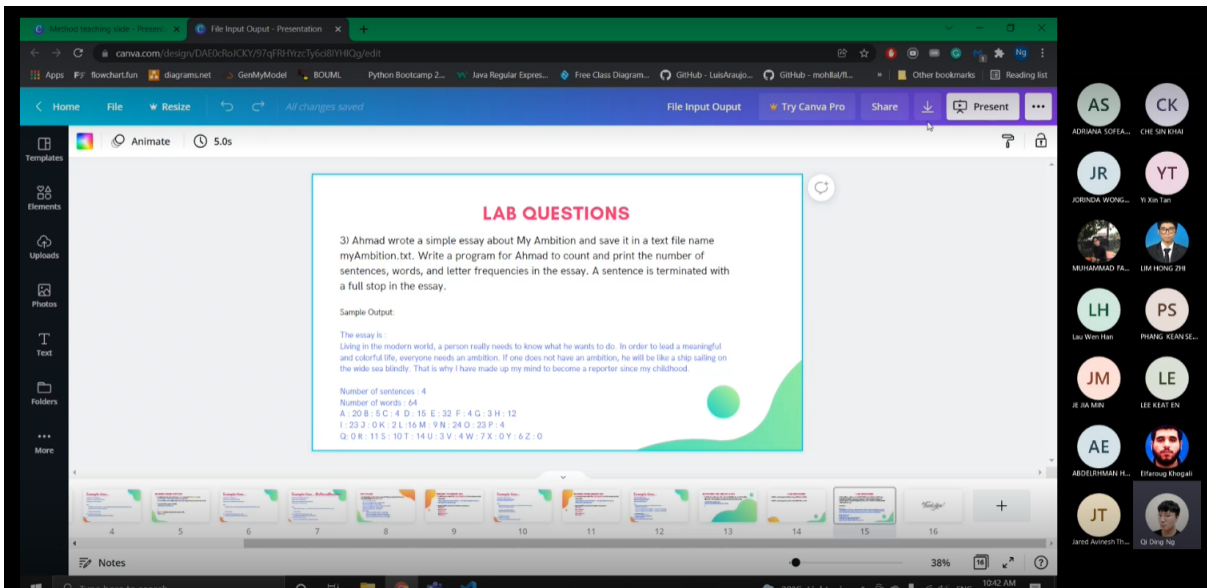


Photo 17: Second session of Java Workshop

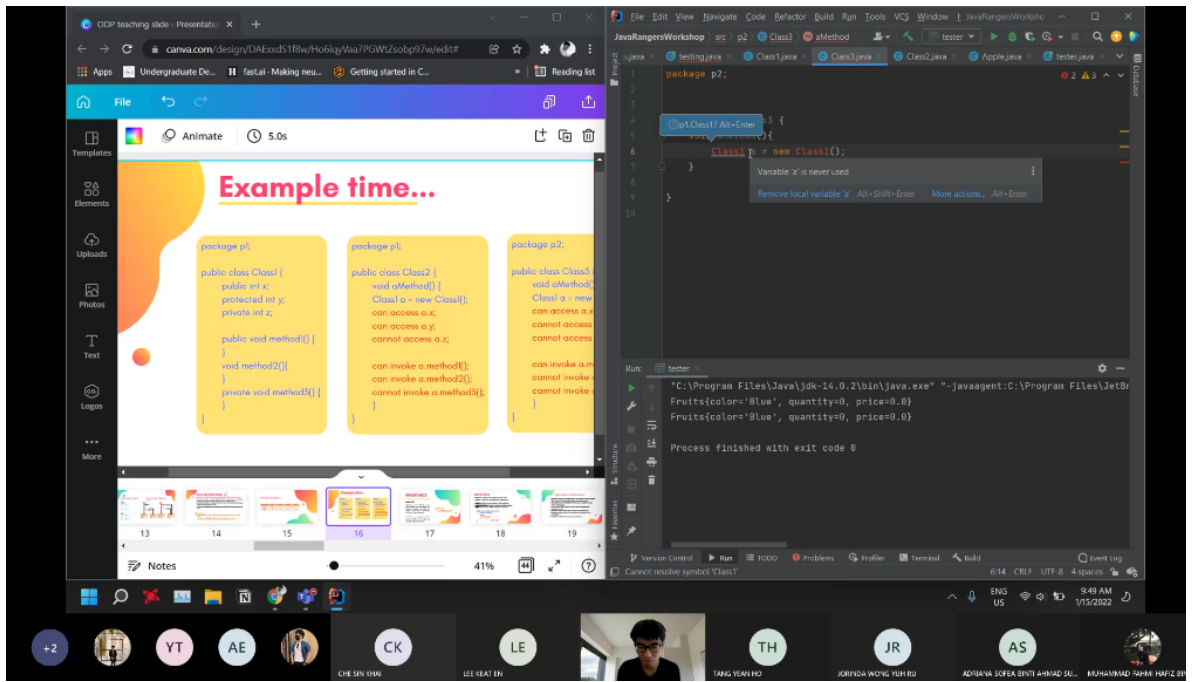


Photo 18: Third session of Java Workshop

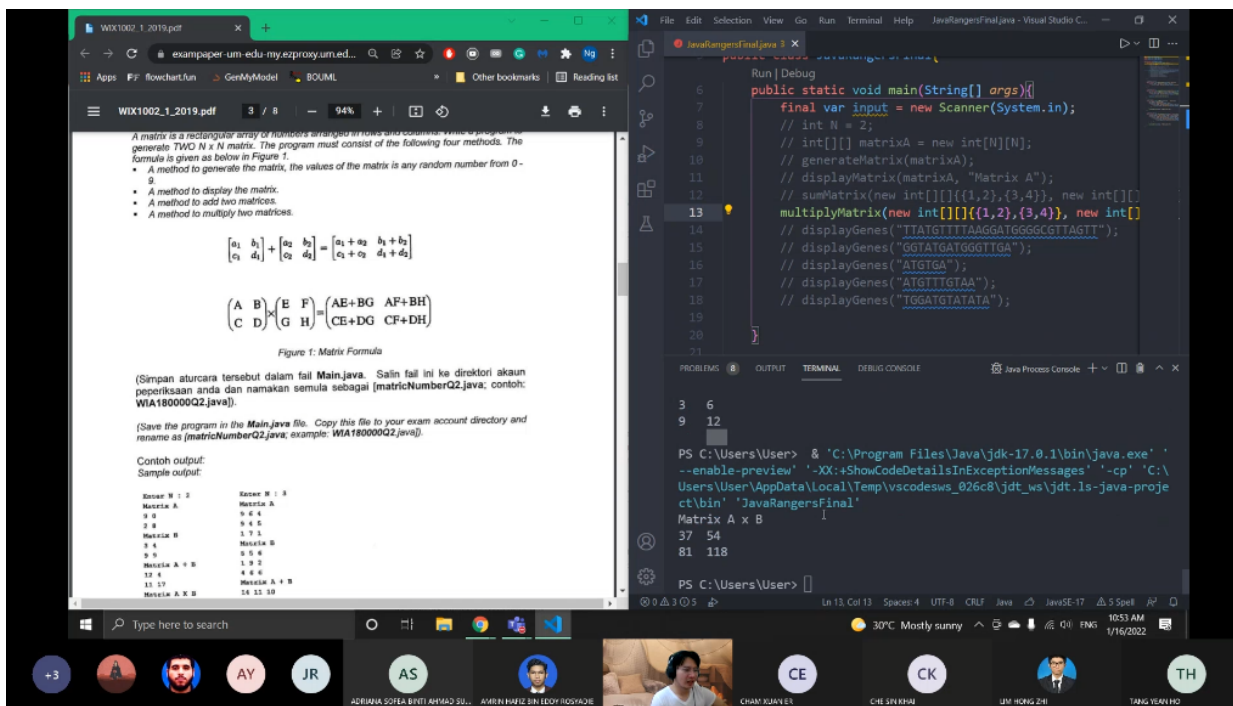


Photo 19: Last session of Java Workshop

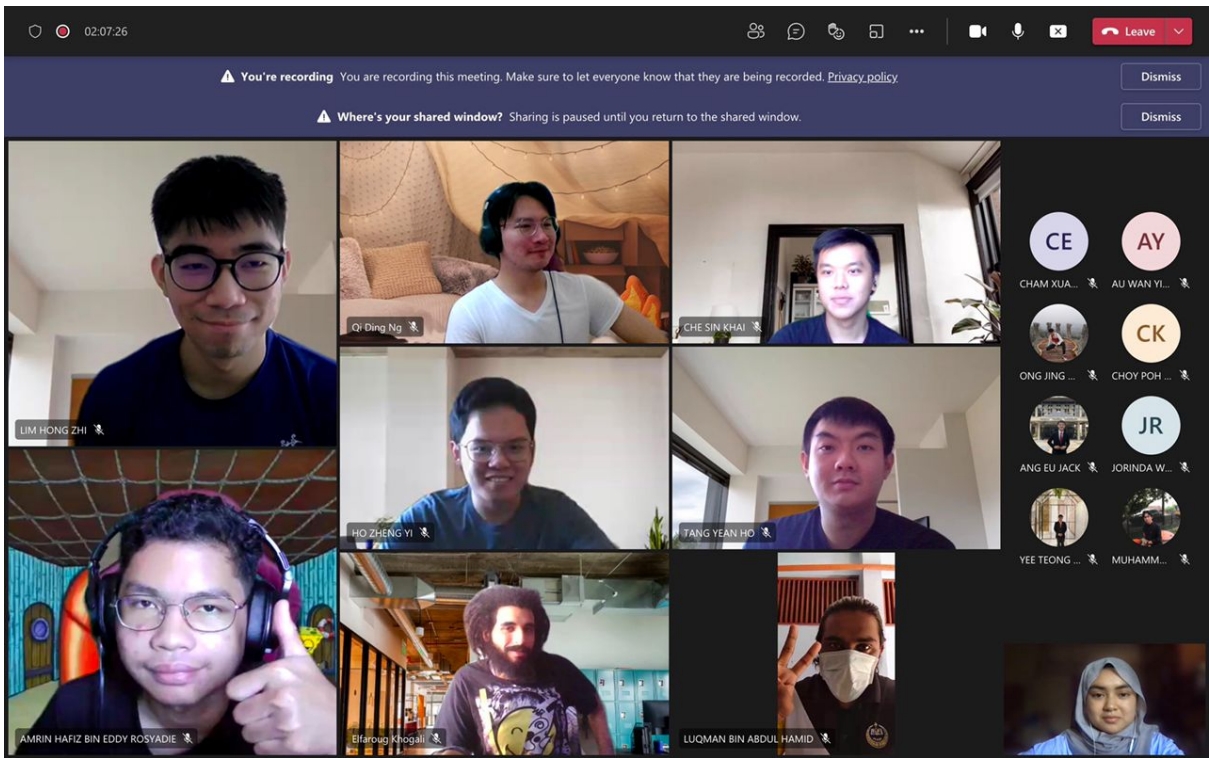


Photo 20: Photo session with the participants

JAVA programming Post-test: Knowledge Testing

Greetings!

This is a quiz to see your improvement after attending our Java Rangers workshop.

We request that you take this quiz without cheating to ensure we fully capture your improvement on Java.

Good luck and have fun! \ (^o^) 人 (^o^) /

u2005291@siswa.um.edu.my (not shared) [Switch account](#)

* Required

Matrics number *

Your answer

Faculty *

Your answer

Background in Java *

	1	2	3	4	5	
Zero	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	High

Photo 21: Java Post-test

JAVA Rangers Workshop Feedback

This google form is created to gain participants' feedback on the programming workshop that has been conducted for 4 days across 2 weeks. It is important for our future improvements

 yeanho1002@gmail.com (not shared) [Switch accounts](#) 

*Required

Are you satisfied with the workshop? *

	1	2	3	4	5	
Not satisfied	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Fully satisfied

Did the workshop help you increasing your knowledge on Java programming? *

Yes
 No

Were you satisfied with the facilitators' help especially during answering your questions? *

	1	2	3	4	5	
Not satisfied	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Fully satisfied

Photo 22: Java Rangers Workshop Feedback Form

Reflection

Adriana Sofea Binti Ahmad Suhaimi

At the start of the project, I was assigned as the leader for my team. I was mainly in charge of the main flow of the project and making sure everything went well. This was a bit nerve-racking since I had never become a leader of any project throughout my degree life so far. Thankfully, the other members were really helpful in working together for the entire project.

While looking for the collaborator, I had taken upon myself to approach our collaborator, PEKOM via email. There, we were asked to provide a brief proposal in order to have our event accepted by them. Due to the lack of template for proposal, I had chosen a proposal template from the Internet, which proved to be wrong when PEKOM told us to redo it. After receiving the template from them, we still had to redo quite a few times before it was accepted and later approved by the president and advisor of PEKOM. I learnt a huge lesson here where while approaching someone or an organisation to ask for collaboration, there has to be very specific requirements to meet depending on the organisation. Although it had been a tiring process, it was very helpful for me now that I know how to formally ask for a collaboration.

Throughout the project, there were many setbacks that had our team scratching our heads trying to think of the next move. A part of our event is by handling a pre-quiz where the participants are expected to take before our first session. However, even after reminding them multiple times, we received a devastating number of responses. We tried to think of how to make the participants take the pre-quiz before the day of the event, but eventually we decided to just keep reminding them and accept the final number of responses which was only 14.

Looking back at the event, I had a feeling that our event would have been running more smoothly if we had chosen to conduct a Java Workshop for beginners instead of having first year FCSIT students being our main target audience. The reason for this is because nearly half of the registered participants were from different faculties with zero background on Java. Due to us mainly focusing our event on the revision of the Foundation of Programming course currently taken by the first year students, it was quite difficult for

those with no Java basics to catch up with the content. However, we did take the beginners into consideration and we welcomed any and all questions even if it seemed simple.

All in all, conducting this event was definitely a good experience for me. Not only was I able to experience being a leader in a group project, I was also lucky to work with helpful and cooperating team members.

Ng Qi Ding

My primary project role was as a lecturer during the main event execution. I had also actively participated in project ideation, definition, implementation, and reflection.

Throughout the entire project, I obtained a fruitful lesson. I should observe and think from multiple perspectives. Before my project involvement, I always believed that I had been very helpful, lending a helping hand to whoever was in trouble. This project experience had shed light on me that my vision had been too narrow. What I viewed or regarded as essential might not be helpful at all to my target audience. Instead of attempting to see by myself, I should listen to them more, empathise with them and fathom their exact needs.

In our project, we were joyous as our idea effectively attracted sufficient participants. Their voluntary involvement proved that our efforts were in the correct direction. We witnessed some students being very punctual and loyal, boosting our confidence in the quality of our content and sessions. However, there are two sides to every coin. We had accomplished several milestones, but there existed tasks executed less ideally. We did not expect the interactions with the participants to be so scarce and lacking. We thought we could catalyse them by being cheerful and friendly, but that was insufficient to spark their interests. As a result, we could not gather enough feedback to adjust the depth of our materials. We tried and hoped to produce content tailored to every valuable member, but we still could not reach our initial ambition and expectation.

In my opinion, we could have done the session entirely by working out the past year's final examination questions. The participants were not engaging with us much during the lecture sessions, and I suspected that the nonuniformity of their mastery rendered them bored. If we were to attempt the daunting questions, we might ignite their passion and have an enthusiastic discussion and communication.

During my participation in the event, I felt joy and relief. The subject WIX1002 Fundamentals of Programming used to be suffocating me. I would not want the experience to replicate on any juniors. Knowing that I was contributing to relieve their struggles, I felt fortunate to propose the idea to mitigate the sufferings. I sincerely hoped that they could feel my passion and extend my efforts in the future.

The activities had made me mentally stronger. I took eight modules, totalling 22 credit hours this semester. Dedicating additional time and energy to this project was indeed stressful and nerve-racking. However, I realised that I should be taking on the challenge given by life, considering it was such an honourable feat.

I had now become a person with better time and emotion management. This project helped me realise the art of helping others, and now I am ready to be of service.

Muhammad Fahmi Hafiz Bin Rozi

This was my first time conducting a JAVA programming workshop and I did not know what to expect at first. I was given the opportunity to be the Graphic Designer and Social Media Manager for the SULAM Project. I could not say that the job scopes were my forte, but I put my best effort into making sure that every task given would be completed.

My tasks were mostly prepared before the workshop was conducted. Some of my tasks were designing posters to promote the workshop, preparing the presentation slide and planning campaigns to attract more students to join the workshop. Honestly, there were lots of hurdles during the preparation of the JAVA workshop that our team had to go through. It was not an easy journey as it was our very first time conducting a programming workshop. Hence, we did not know what to predict. Our main problem throughout the whole workshop was the participation from the students. A lot of efforts were invested into promoting the workshop, but the result was not as good as we thought it would be.

JAVA in general is not a tough programming language to tackle and not many people find it difficult to learn. This might have contributed to a small number of participation from students, especially students from FCSIT. We noticed that students from other faculties outweighed the students from FCSIT which was surprising.

Although there were plenty of challenges along the way, my team and I did not give up easily. We took that opportunity to learn and tackle the problem one by one. Personally, a

few things that our team learned during the workshop helped me to grow as a person. Now I have realised that teamwork is paramount in any event especially if that event is conducted on a huge scale. Thus, I become more open to new ideas and listen to more opinions from teammates. Every task should be delegated evenly so that no one is burdened with too much work.

Overall, the SULAM Project was a golden chance for me to step my game and learn as much as I could. Hopefully, I could implement these new things that I have added into my knowledge to the future projects that I will be involved in. This project would be a success if it were not for my teammates who worked relentlessly without knowing the meaning of tiredness. Hence, I would like to take this opportunity to state my gratification towards them.

Lim Hong Zhi

I had been joining several workshops and online events since my year 1 semester 1 but I had never had an experience in organising an online workshop on my own.

From the start, I had a lot of communication with my teammates. It is very exciting and happy to have a bunch of team members that are proactive and always willing to dedicate their time in contributing to this SULAM project. I had learned a lot of things from them and they had learned a lot from me too. We always share our ideas during our group discussion and make sure our project can run smoothly. I had learned how to negotiate ideas and how to collaborate with others.

My role in the workshop is becoming one of the teachers in the workshop. I had never experienced becoming a teacher in teaching programming before. After I had taken this role, I noticed that there is a lot more than teaching. I need to prepare the resources, prepare what are the things that I want to convey to the participants. I will also need to consider the thoughts of the participants whether they understand what I am talking about, or can they understand the topic more easily. If I am able to make the topic more digestible, they can understand it more easily and fast. Thus, this teaches me to always break complex things into smaller and easier parts so that the person hearing my explanation can understand the topic more easily.

Besides, I am the video editor for the prototype video and the final report. In order to produce an interesting video that can convey what we wanted to deliver to the

audience while making sure that it is not too boring is hard. Thus, I had learned a lot of video editing skills and ideas when editing the videos.

For the workshop, we do not have a lot of participants that are joining us and the participants are not engaging enough. There's a possibility that holding the workshop online is a problem as we are not able to see their reactions towards the things that we are teaching. If there is next time, I hope that we can hold it physically and so that we can have more engaging responses from the participants.

As I am teaching Java in this workshop, I am able to revise back all the fundamentals of Java as I will need to refresh all the knowledge in order to teach them. Through this workshop, I am able to do some exercises on some programming questions and I am able to learn new things too.

In short, this SULAM project provides me the opportunity to learn a lot of things either by myself or by others. It is a memorable experience that I will definitely never forget in the future. I had become a better person after experiencing this project. Thank you to my teammates and our lecturer.

Che Sin Khai

Through this course, Thinking and Communication Skills (WIX2001), I have grabbed my first opportunity in organising an online virtual workshop. Although it might be a new challenge for me since I have zero experience in conducting an online event, but because we work as a team and each of us are special in terms of identity and are always kind hearted in willing to lend a helping hand to each other, it has made our workshop run well.

In this workshop, I am having the responsibility of being a content provider. At first, I thought this role was not hard for me to handle as it might just require searching for some content through the Internet and coming out with a teaching slide. Sounds easy right? But actually not. This is because, although the Internet is an information bank; however, most of the content is already covered inside our university's lecture slides and is quite sufficient for them to build up a firm foundation in JAVA programming. Thus, I have to surf for more resources to produce an informative and quality guaranteed slide so that our participants can gain more from our workshop.

Through this project, I clearly know the importance of teamwork. As one said: "No one can whistle a symphony. It takes a whole orchestra to play it." The project will not succeed if we are not putting full effort and cooperation. Even though our team is shy to speak up at the first meeting, we still manage to break through the barrier and place in our fullest commitment for the sake of making this project a success. Through this matter, it can be seen that there is nothing that can not be done as long as we will always put in our best effort in the activities that we are involved in.

The great thing is that the simplified yet informative teaching slides are able to be completed a few days before the day of the workshop and every tutor manages to have sufficient time to do preparation for better presentation during the workshop. Moreover, it is glad to see that most of our attendees are able to understand our class well as it can be shown from their improvement between pre and post tests. However, during the 4 days workshop, the attendance of the participants for some days did not meet our expectations although we have put great effort in reminding them actively.

In my perspective, I personally think that the workshop should be conducted physically as face-to-face teaching is always better than teaching through online. With face-to-face teaching, tutors are easier to monitor their students' progress and their understanding level also provides them hands-on assistance on time. Through this learning environment, we can ensure that our students really pick something up as compared to the virtual learning which is quiet most of the time.

Lastly, I would like to express my feeling toward the process of conducting this workshop by using one word — Satisfied. Although it was not an easy job to deal with and is time consuming, I am grateful because of this workshop I have strengthened my JAVA fundamental knowledge. On the other hand, through this chance, I am more exposed to conducting a virtual event Huge thanks to my teammates and our lecturer.

Tang Yean Ho

In the past, I had never had any experience in conducting any kind of workshop or online events. During the semester, I had an opportunity to conduct my first ever workshop with my team members. We had hands-on experience on researching and determining the needs, finalising the focus of this workshop, planning for the workshop, finding collaborators and the whole execution process on making this event a success.

Everyone on the team was as clueless as I was because none of us had any idea on how to kickstart and plan for this workshop. However, this was also a really fun process for us to learn and be proactive in discussion and everyone is willing to delegate extra time from their daily schedules to ensure this workshop is a successful one. The discussion with the team members would always be filled with jokes and laughter but we will still make progress after each discussion. In the end, we have finalised our opinions and decided to conduct an online Java Workshop.

I was super honoured to be one of the teachers in the Java Workshop as I was actually quite reluctant at first because I was also struggling with Java programming in Year 1. With doubts and worries that I might not be fit for that role, I accepted the challenge to be one of the teachers during the workshop thanks to my supportive team members that would always have my back.

After fulfilling my role as a teacher, I have realised that being a teacher is not as easy as just teaching. There are so many preparations that need to be done before the session and to ensure easy absorption of the students, teachers must utilise the simplest way possible and prepare the materials beforehand. I had to think of simpler illustrations of complex questions to ensure that students can understand the topic in a more digestible way.

Besides that, during the session I realised how hard it is for a teacher to know whether their students understand the topic or not, especially when it is conducted online. I am not able to see the students' reactions, therefore, there is also very little interaction between me and the students as most of the time the students were just remaining silent. This has left me in doubt, whether the students understand what I am teaching or not.

Looking back at the whole process of this SULAM project, I would consider this a successful one. Our group manages to execute what we have planned smoothly, everyone is willing to contribute to this project and most importantly I believe every one of us learnt something valuable from this SULAM project.

For myself, I have learnt that teamwork will make a difference and I have gained a fruitful experience on how to conduct an event and that nothing is impossible. There is 0% chance of success if you never give it a try. However, a little disappointment is that the outcome of the event was not as our group's expectation. The registered participants did not turn up on the event day and the interaction of participants in the event was too little.

All in all, conducting this event was a fun and memorable process and a good experience for me!

Conclusion

In conclusion, this SULAM project is considered a success. Throughout the JAVA programming workshop, our team did our best in making sure that its objectives were met. Based on the pre and post quiz that we distributed, the participants' foundation of programming was improved. Not to mention, our team managed to increase students' participation in the programming workshop as most of the participants voted to join the workshop again in the future based on the survey that was given. This is a huge step up as it is not easy to get participation from students especially if it involves an education workshop.

While the workshop was a success, our team would like to suggest a few recommendations on how the project should be conducted in future. Firstly, this SULAM project should not have any minimum number of participants required. One of our main problems was the number of students joining the workshop. Since this workshop was optional and not an obligation for the students to join, it was hard to gain their participation. Generally, only a minority of students will be having trouble with programming. Therefore, we cannot expect a large number of students to join the workshop. Secondly, the workshop should be conducted physically and not virtually. Due to this pandemic, the workshop had to be conducted online using Microsoft Teams. It was a meticulous and boring process. This is mainly due to the lack of interaction between the facilitators and the participants. Not to mention, the weak internet connection was also a hurdle that our team had to go through. There are many weaknesses if a program is conducted virtually. Hence, our team would like to suggest that the next project ought to be conducted physically.

Lastly, it is hoped that this SULAM project will be conducted again in the future as it teaches students to be more organised and increase their technical skills. Our team would like to express our gratification towards all parties who were directly or indirectly involved in the success of the project, especially our lecturer, Dr Unaizah Hanum Obaidellah for giving us lots of guidance. Not to forget, our project would not have run smoothly without the help and teamwork from the group members as well. Everyone's dedication and efforts were the main factors that helped the project to have good execution.

Appendix

Prepared by,



Adriana Sofea Binti Ahmad Suhaimi
Director,
Java Workshop,
Universiti Malaya

Checked by,



Teo Richie
President,
Persatuan Komputer Universiti Malaya
Universiti Malaya

Approved by,



ASSOCIATE PROF. DR. MAIZATUL AKMAR ISMAIL
DEPUTY DEAN (UNDERGRADUATE)
FACULTY OF COMPUTER SCIENCE &
INFORMATION TECHNOLOGY
UNIVERSITI MALAYA
61000 KUALA LUMPUR

**PROF. MADYA DR. MAIZATUL
AKMAR ISMAIL**
Advisor,
Persatuan Komputer Universiti Malaya
Universiti Malaya

1.1 Java Rangers approval from the President and Advisor of our collaborator, Persatuan Komputer University Malaya (PEKOM)

6 of 20 points Score released Jan 6 3:54 PM

JAVA programming Pretest: Knowledge Testing

Greetings!

Before attending Java Rangers, we require you to take a pre-quiz before the session to gauge your understanding on the topics and to see whether our event has improved your understanding of Java. You may take it whenever you want as long as it is done before our first session.

We request that you take this quiz without cheating to ensure we fully capture your understanding on Java.

Good luck and have fun! \ (^ o ^) 人 (^ o ^) /

* Required

0 of 0 points

Matrics number * _____ / 0

S2010522

Add individual feedback

1.2 Student S2010522 who took the pre-test before attending our Java workshop scored 6 out of 20 points

15 of 20 points Score released Jan 17 12:00 PM

JAVA programming Post-test: Knowledge Testing

Greetings!

This is a quiz to see your improvement after attending our Java Rangers workshop.

We request that you take this quiz without cheating to ensure we fully capture your improvement on Java.

Good luck and have fun! \ (^ o ^) 人 (^ o ^) /

* Required

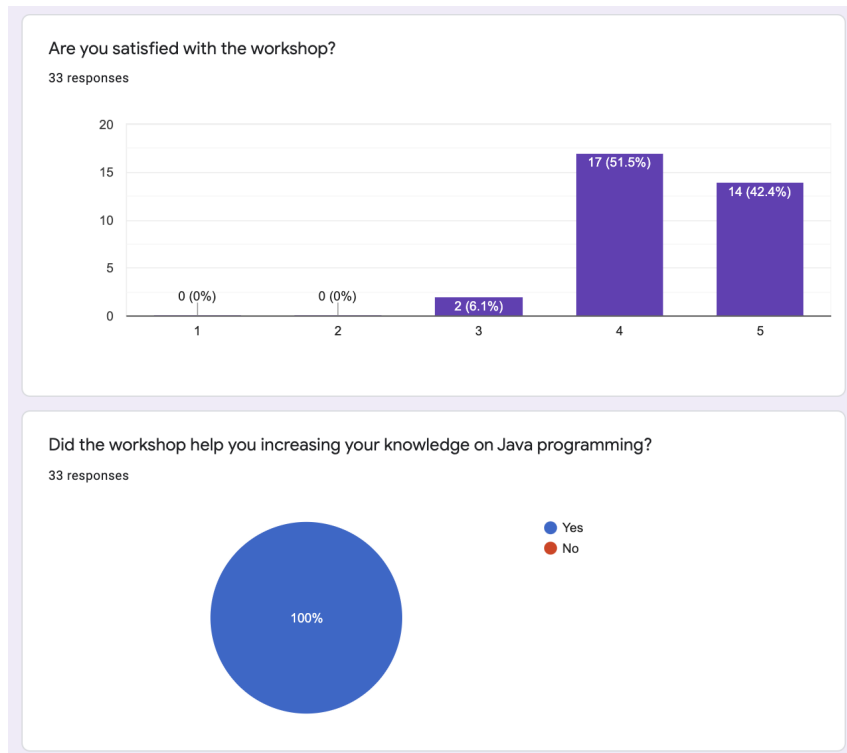
0 of 0 points

Matrics number * _____ / 0

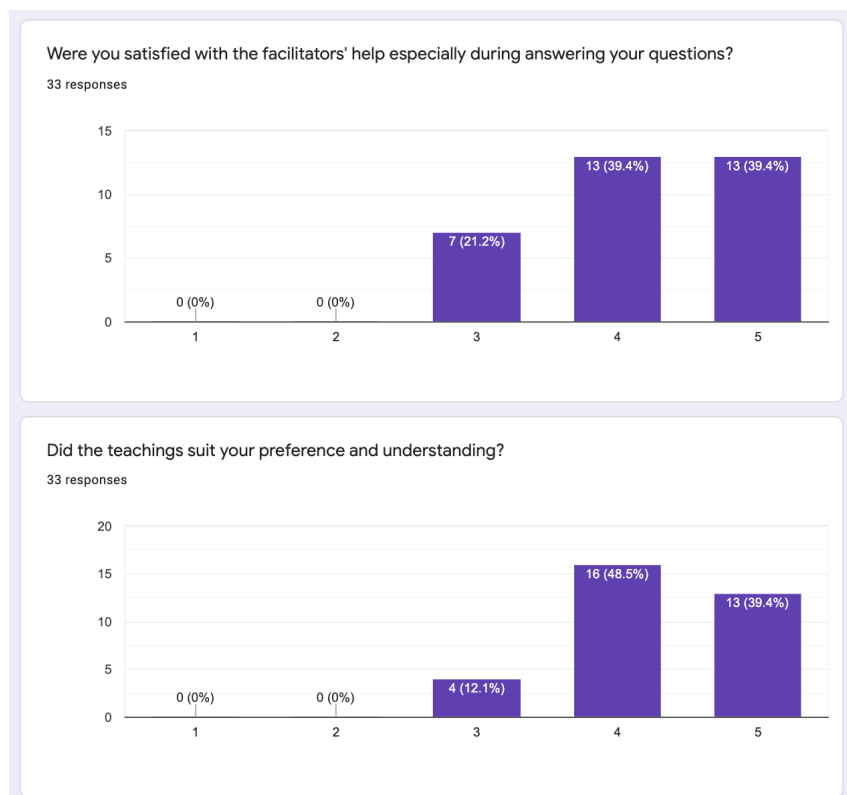
S2010522

Add individual feedback

1.3 Student S2010522 successfully scores 15 out of 20 points in our post-test after attending 4 days of our Java workshop



1.4 Responses for Java Rangers feedback form. All participants seemed to enjoy and benefitted from the workshop



1.5 Responses for Java Rangers feedback form (2)



1.6 Responses for Java Rangers feedback form (3)

How likely are you to tell a friend about this workshop? *

Less likely 1 2 3 4 5 Most likely

Are you likely to participate in one of our events in the future?

Less likely 1 2 3 4 5 Most likely

What did u dislike about the workshop (if any)

I dislike the session being too short. I would love to see you guys more!!!

Submitted 1/16/22, 11:27 AM

1.7 Individual response from one of our participants