**Jose Rizal University**
**College of Computer Studies and Engineering**

**ADVISER ENDORSEMENT FORM**

**School Year: 2023,2024 Semester**

**/ Proposal Defense** **____ Final Defense**

**Project Title:** E-COLLECT: DESIGN AND DEVELOPMENT OF ELECTRONIC WASTE MACHINE

**Name of Student/s**:

**Guro, Ameenah F.** **Ursabia, Elizher James P.**

**Paragas, Michael Dennis D.**

**Querido, Alleckzer A.**

This is to certify that the aforementioned project have successfully completed all pertinent documentation and requisites as required and is properly and sufficiently prepared for oral defense. The manuscript and PowerPoint presentation have been reviewed in compliance with proper formatting and contains sufficient substance to be qualified for oral defense. The student/s are likewise gauged to be fit to defend his/their directed research project.

**Engr. Rosalina R. Estacio**
**Printed name & Signature of Technical Adviser/Date**

Noted by:

**Engr. Rosalina R. Estacio**
**Printed name & Signature Subject Adviser/Date**

Approved by:

**Printed name & Signature Department Chair/Date**

College of Computer Studies and Engineering
Computer Engineering Department
Project & Member Activity Monitoring

| Group Name: Group 5 - E-XPLORERS | | | Member Name: Guro, Ameenah F. | | Subject/Course: CPE C403 | | |
|---|---|---|---|---|---|---|---|
| Program: BSCpE | | Course/Subject: CPE C403 - 401G | Section: 401G | | SY & Semester: 2023-2024 | | |
| Reporting Period | Work completed | Work to be completed next RP | What's going well and why: | What's not going well and why: | Suggestions/Issues | Project Changes (if any) | Signature by Project Manager/Team Leader |
| August 16 - 26 | The team contacted Edispo Philippines for the possible partnership. | Making revisions of our previous Chapter 1-3 on Methods of Research due to necessary content changes, | The team keeps researching more studies related to the topic and also sent a different advisers to be the team's technical adviser. | The team haven't received any confirmation from the advisers we reached out to. | Revisions of Chapter 1 - 3 | N/A | |
| August 27 - September 2 | Engr. Rosalina R. Estacio has agreed to be the team's technical adviser and has signed the acceptance form. | Revising the newly added content in Chapters 1 - 3 is still in progress. | The team has now a technical adviser, allowing us to commence consultations for the revisions of Chapter 1 - 3 | N/A | Revisions of Chapter 1 - 3 | N/A | |
| September 3 - 9 | The team submitted the updated Chapter 1 - 2. | Revising some parts of Chapter 1 based on the comments provided by our technical adviser and continue working the Chapter 3. | The input from our technical adviser greatly aided the team in understanding the potential results of the development of the machine. | The team has minor revisions on Chapter 1 that need to work on. | The technical adviser recommends the team to explorer Flutter and Thunkable for the development of the mobile application part. Additionally, we can start the learning process for the configuration of each component's of the machine development. | N/A | |
| September 10 - 20 | The team consulted the revised Chapter 1 the technical adviser. | Revising some parts of Chapter 1 based on the comments provided by our technical adviser and continue working the Chapter 3. | The input from our technical adviser greatly aided the team in understanding the potential results of the development of the machine. | The team has minor revisions on Chapter 1 that need to work on. | The technical adviser suggested to limit the words in the objectives of the study section. | N/A | |
| September 21 - 29 | Submitted the completed Chapter 1-3 | The team should make revisions to Chapter 3 based on the suggestions of the technical adviser. | The team understood the suggestions of the technical adviser's feedback. | There are many revision and added section in Chapter 3. | sted revisions:<br>• Cite sources or reference for the electronic waste pricelist<br>• Revised the block diagram<br>• Add flowchart per module<br>• Change the CNN Model figure<br>• Tentative Prototype design with labeled parts<br>• Sample IoT design interface<br>• Sample mobile app interface | N/A | |

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| October 10 | The team defended the thesis title. | The panelists suggests to me make revisions on some parts of the Chapters 1-3 according to their feedback. | The insights of the panelists during the defense guides the team towards enhancing the development of the machine. | The panelists approved the thesis title but the team has many revisions on the paper that need to work on within the week. | ggested revisions:<br>• For the reward system monitoring, web application instead of mobile application<br>• Remove the temperature sensor<br>• Revise the flowchart per ule<br>• Depositing of points accumulated is by batch process<br>• Proper spacing of the lines<br>• Table should have discussions after<br>• Limit to 5-6 e-waste list | For the reward system monitoring, instead of mobile application, the panelists suggested to change to web application. | |
| October 11 - 17 | Engaged in discussion with the technical adviser for our completed revised paper. | Submit the revised paper to the panelist through email. | The team completed the revisions within the week. | N/A | The technical adviser suggested to have a main flowchart of the system, showing the sub-modules. | N/A | |
| October 18 - 31 | Emailed the revised paper to the panelists. | N/A | N/A | Due to busy schedules of the panelists, it take some time to review the team's revised paper. | N/A | N/A | |
| November 1 - 8 | The team had discussion withe panelists to address their additional comments and to clarify on certain changes in the reward system part of the development. | Revised some parts of the paper that the panelists have commented. | The team has a clearer understanding of the panelists' recommendations. | The submisison of the compliance form for the team is delayed as consequence of the delayed comments. | uggested revisions:<br>• Consistent font size and line spaces on the paper<br>• The sub-module flowchart does not start with "Start" and ends with "End". The start and end terminals are only used in the main system flowchart.<br>• Discuss the equation based on its used<br>• Admins will notify only if the users reached 100 points or greater. | N/A | |
| November 9 - 15 | The revisions for chapters 1-3, as suggested by the panelists, have been completed. Additionally, the team has submitted the project Gantt chart and work breakdown structure. | Revisions of Project Gantt Chart and Work Breakdown Structure | The revisions for Chapters 1-3 have been completed, and we are currently awaiting the signatures of the panelists for the compliance and synthesis form. | The panelists have not yet signed the synthesis and compliance forms. | N/A | N/A | |

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| **Submitted by:**<br>**Guro, Ameenah F.** | **Checked by:**<br>ENGR. Rosalina Estacio<br>**Technical Adviser**<br>**Name & Signature/Date** | **Verified by:**<br>ENGR. Rosalina Estacio<br>**Subject Adviser**<br>**Name & Signature/Date** |

**College of Computer Studies and Engineering**
**Computer Engineering Department**
**Project & Member Activity Monitoring**

| Group Name: Group 5 | | | Member Name: Paragas, Michael Dennis D. | | | Subject/Course: CPE C403 | |
|---|---|---|---|---|---|---|---|
| Program: BSCpE | | Course/Subject: CPE C403 - 4 | Section: 401G | | SY & Semester: 2021-2022 | | |
| **Reporting Period** | **Work completed** | **Work to be completed next RP** | **What's going well and why:** | **What's not going well and why:** | **Suggestions/Issues** | **Project Changes (if any)** | **Signature by Project Manager/Team Leader** |
| August 16 - 26 | Contacted the Edispo Philippines for the possible collaboration. | Making revisions to Chapter 1 - 3 because some contents needs to be changed. | The team is ongoing with their research that are related to the proposed topic and also the team sent technical adviser proposal to different professors. | There's no definite response from the technical adviser that team contacted. | Revisions of Chapter 1 - 3 | N/A | |
| August 27 - September 2 | The proposal was accepted by Engr. Rosalina Estacio, who was officially endorsed her role as the team's technical advsier by signing the acceptance form. | On going work to modify the additional content in our Chapters 1-3. | The team can start seeking advices from the technical advisers for the revisions. | N/A | Revisions of Chapter 1 - 3 | N/A | |
| September 3 - 9 | The updated Chapter 1-2 has been submitted by the team. | Modifying some sections of the Chapter 1 according to the feedback from our TA and continue working the Chapter 3. | Our technical adviser's comments ang suggestions provided valuable insights into the outcome of the machine. | There are a little revisions on Chapter 1 based on the comments of our technical adviser that need to be addressed. | For the development of the mobile application, the technical adviser suggest to try Flutter and Thunkable. Also, we can commence learning the interface and configuration of each component for the development of the machine. | N/A | |

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| **September 10 - 20** | **The revised Chapter 1 was reviewed with the input from our technical adviser.** | **Modifying some sections of the Chapter 1 according to the feedback from our TA and continue working the Chapter 3.** | **Our technical adviser's comments ang suggestions provided valuable insights into the outcome of the machine.** | **There are a little revisions on Chapter 1 based on the comments of our technical adviser that need to be addressed.** | **Our technical adviser recommned condensing the word count in the objectives of the study.** | **N/A** | |
| **September 21 - 29** | **Submitted the completed Chapter 1 -3** | **Revisions of Chapter 3 according to the comments of our TA.** | **The team gained clarity through the comments of the technical adviser.** | **A lot of revisions with Chapter 3.** | **ested revisions:**<br>**• Cite sources or reference for the electronic waste pricelist**<br>**• Revised the block diagram**<br>**• Add flowchart per module**<br>**• Change the CNN Model figure**<br>**• Tentative Prototype design with labeled parts**<br>**• Sample IoT design interface**<br>**• Sample mobile app interface** | **N/A** | |
| **October 10** | **Thesis title defended.** | **Revise certain parts of the Chapter 1-3 based on the comments provided by the panelists.** | **The panelists' contributions during the defense benefited the team as their ideas would help to the progress and improvement of the project.** | **The panelists have indicated that are remark is "Passed with Revisions". They prefer to review the expected revisions within the week so the group will work on that.** | **ggested revisions:**<br>**• For the reward system monitoring, web application instead of mobile application**<br>**• Remove the temperature sensor**<br>**• Revise the flowchart per ule**<br>**• Depositing of points accumulated is by batch process**<br>**• Proper spacing of the lines**<br>**• Table should have discussions after**<br>**• Limit to 5-6 e-waste list** | **For the reward system monitoring, instead of mobile application, the panelists suggested to change to web application.** | |
| **October 11 - 17** | **Completed the revised paper and consulted with the technical adviser.** | **Send the revised paper to the panelists through email.** | **Our revisions were finished within the week.** | **N/A** | **The technical adviser recommended creating a main system flowchart that illustrates the sub-modules.** | **N/A** | |
| **October 18 - 31** | **Sent the revised paper to the panelists.** | **N/A** | **N/A** | **The panelists are dealing with a busy schedule so it take some time to comment on our revised paper** | **N/A** | **N/A** | |

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| **November 1 - 8** | **A discussion between the team and the panelists to elaborate their additional comments and to make clarification in certain suggested changes.** | **The team will incorporate changes into the paper, considering the comments of the panelists.** | **The team acknowledges the suggestions of the panelists.** | **The team is behind schedule in submitting the compliance form.** | **uggested revisions:**<br>**• Consistent font size and line spaces on the paper**<br>**• The sub-module flowchart does not start with "Start" and ends with "End". The start and end terminals are only used in the main system flowchart.**<br>**• Discuss the equation based on its used**<br>**• Admins will notify only if the users reached 100 points or greater.** | **N/A** | |
| **November 9 - 15** | **Revising the paper from chapter 1-3, following the panel comments. Also did the website for our proposed project.** | **Finalizing the website that contains the details about our proposed project** | **Completed the revisions on the paper and did the initial website** | **Getting the panels signs the compliance and synthesis form** | **N/A** | **N/A** | |

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| **Submitted by:**<br>**Paragas, Michael Dennis** | **Checked by:**<br>ENGR. Rosalina Estacio<br>**Technical Adviser**<br>**Name & Signature/Date** | **Verified by:**<br>ENGR. Rosalina Estacio<br>**Subject Adviser**<br>**Name & Signature/Date** |

**College of Computer Studies and Engineering**
**Computer Engineering Department**
**Project & Member Activity Monitoring**

| Group Name: E-Xplorers | | | Member Name: Querido, Alleckzer A. | | Subject/Course: CPE C403 | | |
|---|---|---|---|---|---|---|---|
| Program: BSCpE | | Course/Subject: CPE C403 - 4 | Section: 401G | | SY & Semester: 2023-2024 | | |
| **Reporting Period** | **Work completed** | **Work to be completed next RP** | **What's going well and why:** | **What's not going well and why:** | **Suggestions/Issues** | **Project Changes (if any)** | **Signature by Project Manager/Team Leader** |
| August 16 - 26 | Proposed a partnership with Edispo Phillipines. | Making revisions on our Chapter 1 - 3 because there are contents that require modification. | The team persists in researching further into the related topic. The team also sent a proposal to the technical adviser we wanted. | We are still waiting for the confirmation from the technical adviser we got in touch with. | Revisions of Chapter 1 - 3 | N/A | |
| August 27 - September 2 | Engr. Rosalina R. Estacio has agreed to be our technical adviser and has signed the acceptance form | Continuing the process of revising for the contents of Chapter 1 - 3 | Having a technical adviser now enables the team to have consultations for the revisions. | N/A | Revisions of Chapter 1 - 3 | N/A | |
| September 3 - 9 | Chapter 1-2 has been submitted by the team. | Making some changes to specific parts of Chapter 1 as per the suggestions from the TA. | The recommendations from our technical adviser proved instrumental in giving us a clear picture of what to expect from the development of the machine. | We have some slight revisions that need to be made. | The technical adviser advises trying out Flutter and Thunkable for the mobile application. It has been also suggested to learn how to configure the interface of each components of the machine. | N/A | |
| September 10 - 20 | Consultation with our technical adviser took place regarding the comments for the Chapter 1 from last week. | Making some changes to specific parts of Chapter 1 as per the suggestions from the TA. Also, continue working on the Chapter 3. | The recommendations from our technical adviser proved instrumental in giving us a clear picture of what to expect from the development of the machine. | We have some slight revisions that need to be made. | Our technical adviser suggested to keep the objectives of the study section concise by limiting the number of words. | N/A | |
| September 21 - 29 | Submitted the completed Chapter 1-3 | Based on the feedback of our technical adviser, we have a lot of revisions and added contents on Chapter 3. | The team agreed with the comments of our technical adviser. This would help the team to finish the Chapter 3. | Many revisions to be made with Chapter 3. | ested revisions:<br>• Cite sources or reference for the electronic waste pricelist<br>• Revised the block diagram<br>• Add flowchart per module<br>• Change the CNN Model figure<br>• Tentative Prototype design with labeled parts<br>• Sample IoT design interface<br>• Sample mobile app interface | N/A | |

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|---|---|---|---|---|---|---|---|
| October 10 | We defended our thesis title. | Make revisions of the Chapters 1-3 based on the comments of the panelists. | The ideas articulated by the panelists during the defense helped in advancing the team's effort in developing the machine. | Even though the panelists approved the thesis title, there are extensive revisions that needs attention and effort of the team | ggested revisions:<br>• For the reward system monitoring, web application instead of mobile application<br>• Remove the temperature sensor<br>• Revise the flowchart per ule<br>• Depositing of points accumulated is by batch process<br>• Proper spacing of the lines<br>• Table should have discussions after<br>• Limit to 5-6 e-waste list | For the reward system monitoring, instead of mobile application, the panelists suggested to change to web application. | |
| October 11 - 17 | Completed the panelists' suggestions on our paper and consulted the technical adviser. | Email the revised paper to the panelists. | Accomplished the revisions suggested by the panelists within the week. | N/A | As per the technical adviser's suggestions, include a main system flowchart highlighting the sub-modules. | N/A | |
| October 18 -31 | Submitted the revised paper to the panelists. | N/A | N/A | The panelists are having hectic schedules to provide comments on our paper. | N/A | N/A | |
| November 1 - 8 | The team had discussion to obtain extra clarification on specific changes made to the project. | The team will modify certain parts of the paper based on the insights of the panelists. | The team is aligned with their vision for the project's outcome to the suggestions from the panelists. | The delay in receiving comments from the panelists has resulted in late submission of the compliance form. | uggested revisions:<br>• Consistent font size and line spaces on the paper<br>• The sub-module flowchart does not start with "Start" and ends with "End". The start and end terminals are only used in the main system flowchart.<br>• Discuss the equation based on its used<br>• Admins will notify only if the users reached 100 points or greater. | N/A | |
| November 9 - 15 | Project Gantt Chart & WBS | Revision of Gantt chart and WBS | The team completed all the suggested revision on the paper | Waiting for panelists reponse for the submission of signed project synthesis form. | N/A | N/A | |

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| Submitted by:<br>Querido, Alleckzer A. | Checked by:<br>ENGR. Rosalina Estacio<br>Technical Adviser<br>Name & Signature/Date | Verified by:<br>ENGR. Rosalina Estacio<br>Subject Adviser<br>Name & Signature/Date |

College of Computer Studies and Engineering
Computer Engineering Department
Project & Member Activity Monitoring

| Group Name: Group 5 - E-XPLORERS | | | Member Name: Ursabia, Elizher James P. | | Subject/Course: CPE C403 | | |
|---|---|---|---|---|---|---|---|
| Program: BSCpE | | Course/Subject: CPE C403 - 401G | Section: 401G | | SY & Semester: 2021-2022 | | |
| **Reporting Period** | **Work completed** | **Work to be completed next RP** | **What's going well and why:** | **What's not going well and why:** | **Suggestions/Issues** | **Project Changes (if any)** | **Signature by Project Manager/Team Leader** |
| August 16 - 26 | Reached out to Edispo Philippines about the possible partnership. | Revising the Chapter 1 - 3 because there are contents that need to changed. | The planning of the research is going well for our group because we have already working on the things we have to put in our documents. | There's still no confirmation for the TAs we contacted. | Revisions of Chapter 1 - 3 | Currently, there are no changes except for the revision of Chapter 1 - 3 | |
| August 27 - September 2 | The team's technical adviser position has been accepted by Engr. Rosalina R. Estacio. | The revisions of the added content in Chapters 1-3 is ongoing. | The team can start consulting for the revisions of the Chapters 1-3 | N/A | Revisions of Chapter 1 - 3 | N/A | |
| September 3 - 9 | We already submitted the updated Chapter 1-2 | The chapter 1 is to be revised according to the comments and suggestions of our technical adviser. | The advice from our technical adviser was beneficial in helping us grasp the projected outcome of the development of the machine. | We have minor revisions that needs to work on. | It has been suggested to try Flutter and Thunkable for the developement of the mobile application. In addition, the team can start to learn how to configure the components needed for the machine. | N/A | |
| September 10 - 20 | The team discussed the updated Chapter 1 with the technical adviser. | The chapter 1 is to be revised according to the comments and suggestions of our technical adviser. Also, finised the Chapter 3. | The advice from our technical adviser was beneficial in helping us grasp the projected outcome of the development of the machine. | We have minor revisions that needs to work on. | Paraphrase and limit the number of words in the objectives of the study. | N/A | |
| September 21 - 29 | Submitted the completed Chapter 1-3 | Revised the Chapter 3 according to the comments of the technical adviser. | The team found enlightenment from the technical adviser's comments. | Revisions to Chapter 3 and additional sample interfaces of the project. | ggested revisions:<br>• Cite sources or reference for the electronic waste pricelist<br>• Revised the block diagram<br>• Add flowchart per module<br>• Change the CNN Model figure<br>• Tentative Prototype design with labeled parts<br>• Sample IoT design interface<br>• Sample mobile app interface | N/A | |

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|---|---|---|---|---|---|---|---|
| October 10 | The team defended the thesis title and approved by the panelists. | Modify some parts of the Chapter 1-3 in accordance with the comments given by the panelists. | The development of the machine has positive advancements because of the valuable input provided by the panelists during the defense for more effective outcome. | The panelists approved the thesis title but the team has many revisions on the paper that need to work on within the week. | Suggested revisions:<br>• For the reward system monitoring, web application instead of mobile application<br>• Remove the temperature sensor wchart per module<br>• Depositing of points accumulated is by batch process<br>• Proper spacing of the lines<br>• Table should have discussions after<br>• Limit to 5-6 e-waste list | For the reward system monitoring, instead of mobile application, the panelists suggested to change to web application. | |
| October 11 - 17 | Completed the revised paper and we have consulted our technical adviser before submitting it. | Email the revised paper to the panelists. | Finished the revisions within the week. | N/A | Incorporate a main system flowchart with the breakdown of sub-modules. | N/A | |
| October 18 - 31 | The team sent an email to the panelists attaching the revised paper. | N/A | N/A | The panelists are currently taking time to respond to provide comments in our revised paper. | N/A | N/A | |
| November 1 - 8 | The team had discussions with the panelists to gain insights into their additional comments. | The team will make revisions to certain sections of the paper in response to the feedback of the panelists. | The team understands the expectations of the panelists for the project's outcome. | The submission of the compliance form is delayed due to the late responses of the panelists. | Suggested revisions:<br>• Consistent font size and line spaces on the paper<br>• The sub-module flowchart does not start with "Start" and ends with "End". The start and end terminals are only used in the main system flowchart.<br>• Discuss the equation based on its used<br>• Admins will notify only if the users reached 100 points or greater. | N/A | |
| November 9 - 15 | We have revised our paper based on the changes given by our panelists. We also made the Work Breakdown Structure together its Gantt Chart. | Revise the Work Breakdown Structure and Gantt Chart | We already fixed the changes needed for our paper. | We haven't received the signatures of the panelists. | N/A | N/A | |

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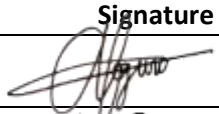
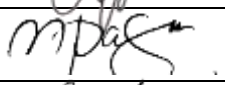
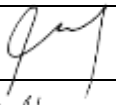
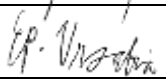
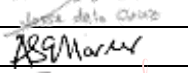
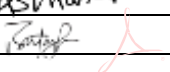
|---|---|---|
| Submitted by:<br>Ursabia, Elizher James P.<br>E.P. Ursabia | Checked by:<br>ENGR. Rosalina Estacio<br>Technical Adviser<br>Name & Signature/Date | Verified by:<br>ENGR. Rosalina Estacio<br>Subject Adviser<br>Name & Signature/Date |

**Jose Rizal University**
**College of Computer Studies and Engineering**
**Computer Engineering Department**

**EGR 55 – Methods of Research**
**Design Project Proposal - Project Synthesis Form**
**1st semester, SY 2023 to 2024**

| **Title of Design Project Proposal: E-COLLECT: DESIGN AND DEVELOPMENT OF ELECTRONIC WASTE REVERSE VENDING MACHINE** | |
|---|---|
| **Project Features/Description** | |
| Implement a system for effectively classifying e-waste items | |
| Develop a machine framework that is capable of storing and accepting various e-waste items | |
| Incorporate a machine's touchscreen display for electronic device deposits | |
| Develop algorithm to differentiate types of electronic devices | |
| develop a reward system that incentivizes users to dispose their electronic waste. | |
| A user-friendly web application that allows users to monitor rewards they have earned from the machine. | |
| Creation of a admin dashboard to manage and monitor the incentive system, including users accounts, reward distribution, and system maintenance. | |
| Incorporate Internet of Things sensors to track the bin's capacity. | |
| Provide a system that notifies the admin panel in real-time of the fill level of the bin. | |
| Provide alerts for admins when the machine fills to a certain level to perform maintenance. | |
| **Group Member** | **Signature** |
| 1. Guro, Ameenah F. |  |
| 2. Paragas, Michael Dennis |  |
| 3. Querido, Alleckzer A. |  |
| 4. Ursabia, Elizher James P. |  |
| **Technical Adviser: Engr. Rosalina Estacio** | |
| **Panel Approval** | |
| 1. Engr. Jesse Delacruz | |
| 2. Engr. Amor Ellares |  |
| 3. Engr. Mark Jayson Sutayco |  |
| **Noted by:** | |
| Engr. Rosalina Estacio<br>**Subject Adviser** | Engr. Monette Loy-a<br>**Dept. Head, Computer Engineering** |
| **Engr. Liza R. Reyes**<br>**Dean, College of CSE** | |

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Jose Rizal University
**COLLEGE OF COMPUTER STUDIES AND ENGINEERING**

**Project Milestone Report**

**IMPORTANT DATES:**
Initial Presentation: Week 8
Endorsement: Week 10
Final Presentation: Week 11
Revisions: Week 13 –Week 14
Final Documentation: Week 16
*Note: Schedule of re-defense subject for approval by Committee on Project*

| **Group Name:** E-XPLORERS | **Code/Section:** CPE C403-401G | **Semester/SY:** 1st Semester 2023-2024 | **Date:** September 07, 2023 |
|---|---|---|---|
| **Members:** Guro, Ameenah F**. \|** Paragas, Michael Dennis D**. \|** Querido, Alleckzer A. **\|** Ursabia, Elizher James P. | | | |
| **Project Title: ElektroMatik:** Electronic Waste Machine with Reward System | | | |

| **Deliverables** | **Target date completion** | **Work Accomplished** | **Issues encountered** | **Comments & Suggestions** | |
|---|---|---|---|---|---|
| | | | | **Technical Adviser** | **Subject Adviser** |
| Chapter 1-2<br><br>Chapter 3 | August 30, 2023<br><br>September 13, 2023 | - Partnership with Edispo Philippines<br><br>- Submitted the Chapter 1-2<br><br>- The team studied the various related studies from our project. | - The team was not entirely certain about all the components required for the machine.<br><br>- The integration of the reward system has not been finalized | - It has been suggested that each of the team members will explore and learn Flutter and Thunkable for the development of our mobile application.<br><br>- Revisions of Chapter 1<br><br>- Finalize the hardware and software needed<br><br>- Study how to interface and configure every component of the machine. | |

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| | | | | - Proceed completing the Chapter 3 | |

| Submitted by: | Checked by: | Verified by: |
|---|---|---|
| **Guro, Ameenah F.** **Paragas, Michael Dennis D.**<br>**Querido, Alleckzer A.** **Ursabia, Elizher James P.** | **Engr. Rosalina R. Estacio**<br>**Technical Adviser**<br>**Name & Signature/Date** | **Engr. Rosalina R. Estacio**<br>**Subject Adviser**<br>**Name & Signature/Date** |

Note: This should be submitted to the Subject Adviser on weekly basis with an attachment of activity pictures pertaining to the activity stated in the report.

**PROOF OF CONSULTATION**

Jose Rizal University
**COLLEGE OF COMPUTER STUDIES AND ENGINEERING**

**Project Milestone Report**

**IMPORTANT DATES:**
Initial Presentation: Week 8
Endorsement: Week 10
Final Presentation: Week 11
Revisions: Week 13 –Week 14
Final Documentation: Week 16 *Note: Schedule of re-defense subject for approval by Committee on Project*

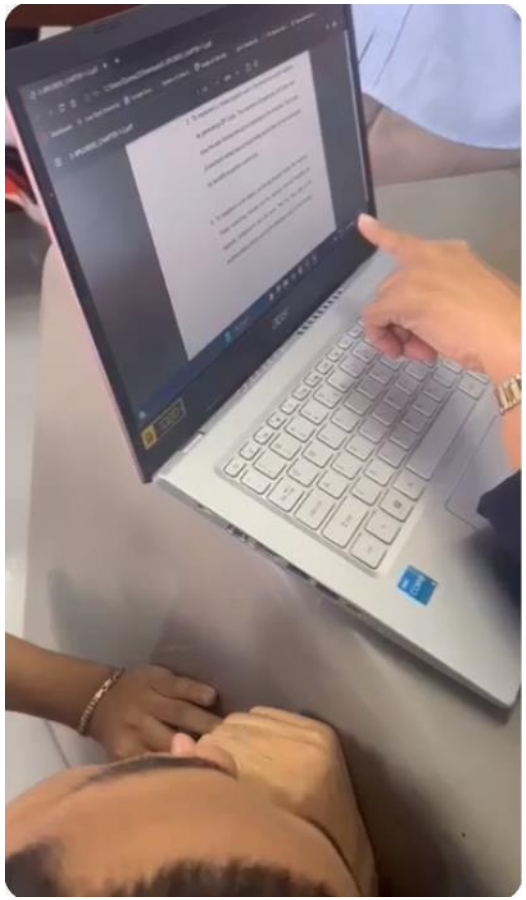
| **Group Name: E-XPLORERS** | **Code/Section: CPE C403-401G** | **Semester/SY: 1st Semester 2023-2024** | **Date: September 17, 2023** |
|---|---|---|---|
| **Members: Guro, Ameenah F. \| Paragas, Michael Dennis D. \| Querido, Alleckzer A. \| Ursabia, Elizher James P.** | | | |
| **Project Title: E-COLLECT: DESIGN AND DEVELOPMENT OF ELECTRONIC WASTE REVERSE VENDING MACHINE** | | | |

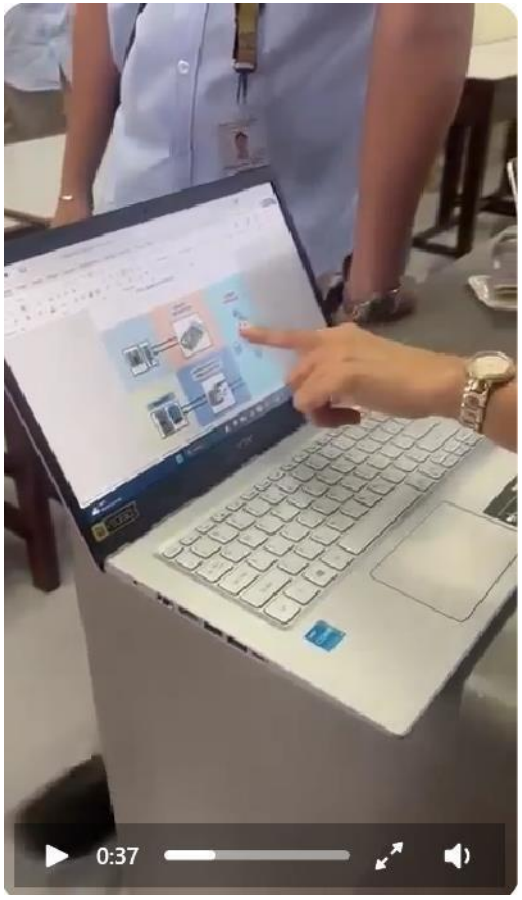
| **Deliverables** | **Target date completion** | **Work Accomplished** | **Issues encountered** | **Comments & Suggestions** | |
|---|---|---|---|---|---|
| | | | | **Technical Adviser** | **Subject Adviser** |
| • Revision of Chapter 3 | • September 20, 2023 | • The team has already polished other parts of the paper.<br>• The team already completed the draft for Chapter 3.<br>• The team already explored different tools to use for building mobile applications.<br>• The team has explored different hardware and software applications. | • The team is uncertain about the storing of database after an item is placed in the machine.<br>• The team is also uncertain how it will be possible to connect to the mobile app after classifying. | • It has been suggested that we should focus and think about how we will be able to store the data, its either from the mobile app or in the database.<br>• Finalize the software and components that need to be used. | |

| Submitted by: | Checked by: | Verified by: |
|---|---|---|
| **Guro, Ameenah F. Paragas, Michael Dennis D.**<br><br>**Querido, Alleckzer A. Ursabia, Elizher James P.** | **Engr. Rosalina R. Estacio**<br>**Technical Adviser**<br>**Name & Signature/Date** | **Engr. Rosalina R. Estacio**<br>**Subject Adviser**<br>**Name & Signature/Date** |

Note: This should be submitted to the Subject Adviser on weekly basis with an attachment of activity pictures pertaining to the activity stated in the report.

**PROOF OF CONSULATION:**





Jose Rizal University
**COLLEGE OF COMPUTER STUDIES AND ENGINEERING**

**Project Milestone Report**

**IMPORTANT DATES:**
Initial Presentation: Week 8
Endorsement: Week 10
Final Presentation: Week 11
Revisions: Week 13 –Week 14
Final Documentation: Week 16
*Note: Schedule of re-defense subject for approval by Committee on Project*

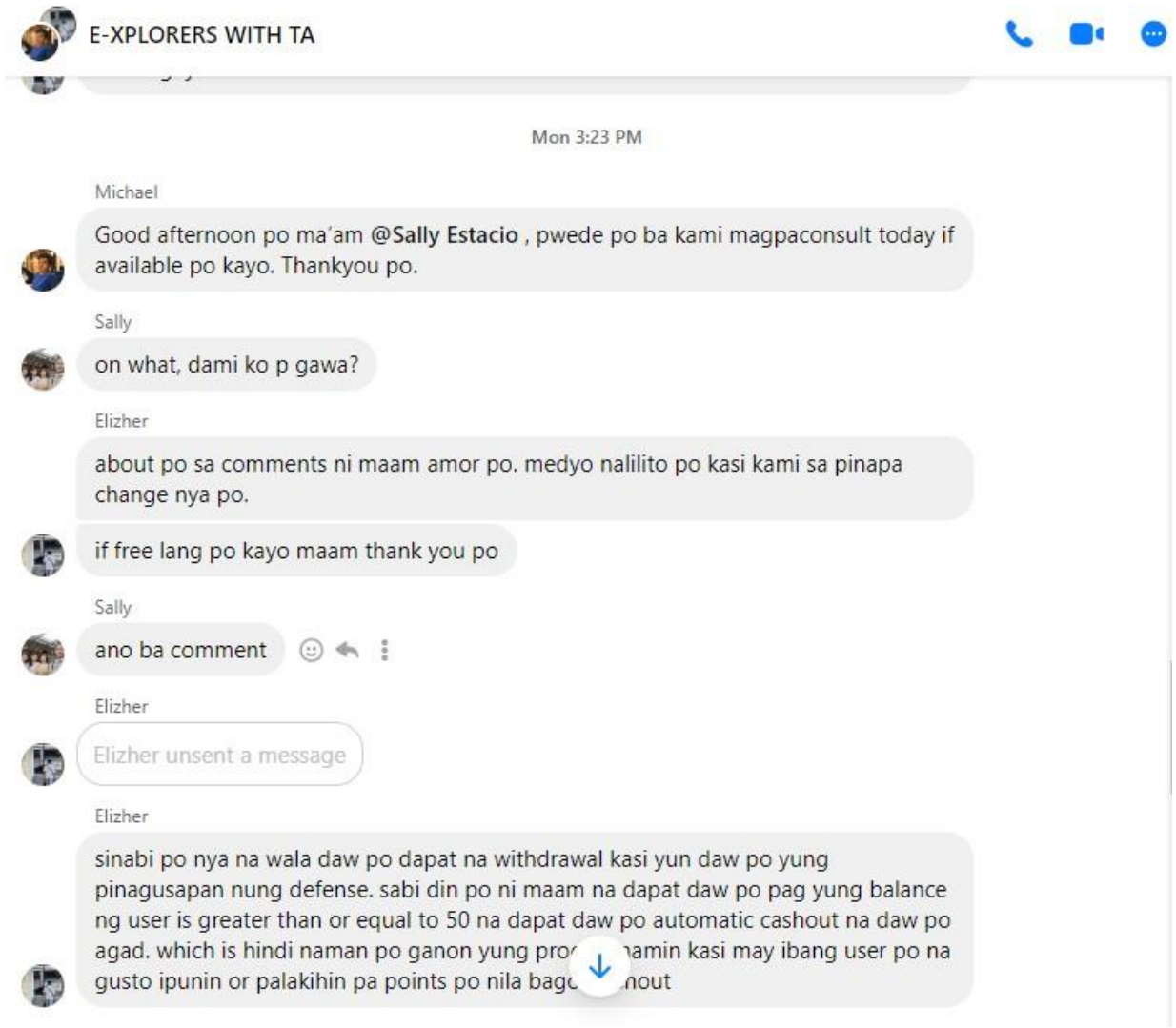
| **Group Name: E-XPLORERS** | **Code/Section: CPE C403-401G** | **Semester/SY: 1st Semester 2023-2024** | **Date: November 12, 2023** |
|---|---|---|---|
| **Members: Guro Ameenah F. \| Paragas, Michael Dennis D. \| Querido, Alleckzer A. \| Ursabia, Elizher P.** | | | |
| **Project Title: E-COLLECT: DESIGN AND DEVELOPMENT OF ELECTRONIC WASTE REVERSE VENDING MACHINE** | | | |

| **Deliverables** | **Target date completion** | **Work Accomplished** | **Issues encountered** | **Comments & Suggestions** | |
|---|---|---|---|---|---|
| | | | | **Technical Adviser** | **Subject Adviser** |
| **Chapter 1-3** | **Nov. 5-11** | **The team completed all the suggested revision on the paper.** | **The team is having difficulty in how we should assess all the suggestion from the panelists for revisions on our group's thesis paper.** | **It has been suggested to incorporate all the revisions recommended by the panelists in our thesis paper.** | |

| **Submitted by:** | **Checked by:** | **Verified by:** |
|---|---|---|
| **Querido, Alleckzer A. Guro, Ameenah F.**<br>**Paragas, Michael Dennis Ursabia, Elizher James P.** | **Engr. Rosalina R. Estacio**<br>**Technical Adviser**<br>**Name & Signature/Date** | **Engr. Rosalina R. Estacio**<br>**Subject Adviser**<br>**Name & Signature/Date** |

Note: This should be submitted to the Subject Adviser on weekly basis with an attachment of activity pictures pertaining to the activity stated in the report.

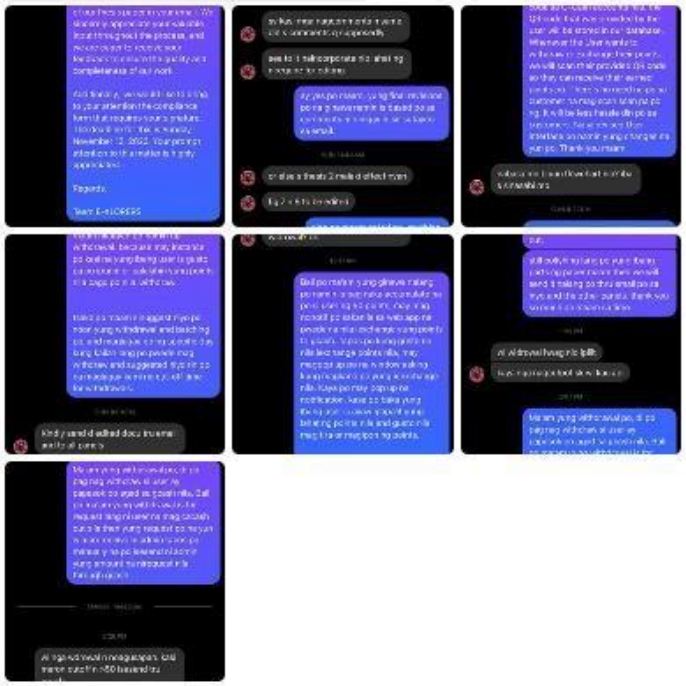
**SCREENSHOT OF CONSULTATION WITH THE TECHNICAL ADVISER**



E-XPLORERS WITH TA

maam pinaliwanag na po namin many times po pero parang yun nga po ang gusto nya

send ko po screenshot maam



Mon 4:15 PM

Sally

yan dw gusto nila so sundin nyo nalang para tapos na

E-XPLORERS WITH TA

Mon 4:15 PM

Sally

yan dw gusto nila so sundin nyo nalang para tapos na

4:15pm

3

Alleckzer

sige po mam pagusapan na po namin. thank you po.

Jose Rizal University
**COLLEGE OF COMPUTER STUDIES AND ENGINEERING**

**Project Milestone Report**

**IMPORTANT DATES:**
Initial Presentation: Week 8
Endorsement: Week 10
Final Presentation: Week 11
Revisions: Week 13 –Week 14
Final Documentation: Week 16
*Note: Schedule of re-defense subject for approval by Committee on Project*

| **Group Name: E-XPLORERS** | **Code/Section: CPE C403-401G** | **Semester/SY: 1st Semester 2023-2024** | **Date: November 19, 2023** |
|---|---|---|---|

**Members: Guro Ameenah F. | Paragas, Michael Dennis D. | Querido, Alleckzer A. | Ursabia, Elizher P.**

**Project Title: E-COLLECT: DESIGN AND DEVELOPMENT OF ELECTRONIC WASTE REVERSE VENDING MACHINE**

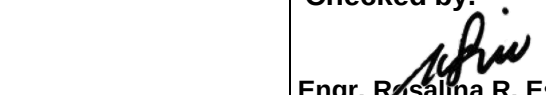
| **Deliverables** | **Target date completion** | **Work Accomplished** | **Issues encountered** | **Comments & Suggestions** | |
|---|---|---|---|---|---|
| | | | | **Technical Adviser** | **Subject Adviser** |
| • Compliance and Synthesis Form<br>• Project Google Site<br>• Patent Search Activity | • November 18, 2023<br>• November 15, 2023<br>• November 15, 2023 | • The team has sent the completed revised paper to the panelists and we are just waiting for their response.<br>• Finished the project Google site<br>• Finished the patent search activity. | • The team is still waiting for the response of the panelists regarding whether the final revised paper is approved to them. | | |

**Submitted by:**

**Querido, Alleckzer A. Guro, Ameenah F.**

**Paragas, Michael Dennis D. Ursabia, Elizher James P.**

**Checked by:**



**Engr. Rosalina R. Estacio**
**Technical Adviser**
**Name & Signature/Date**

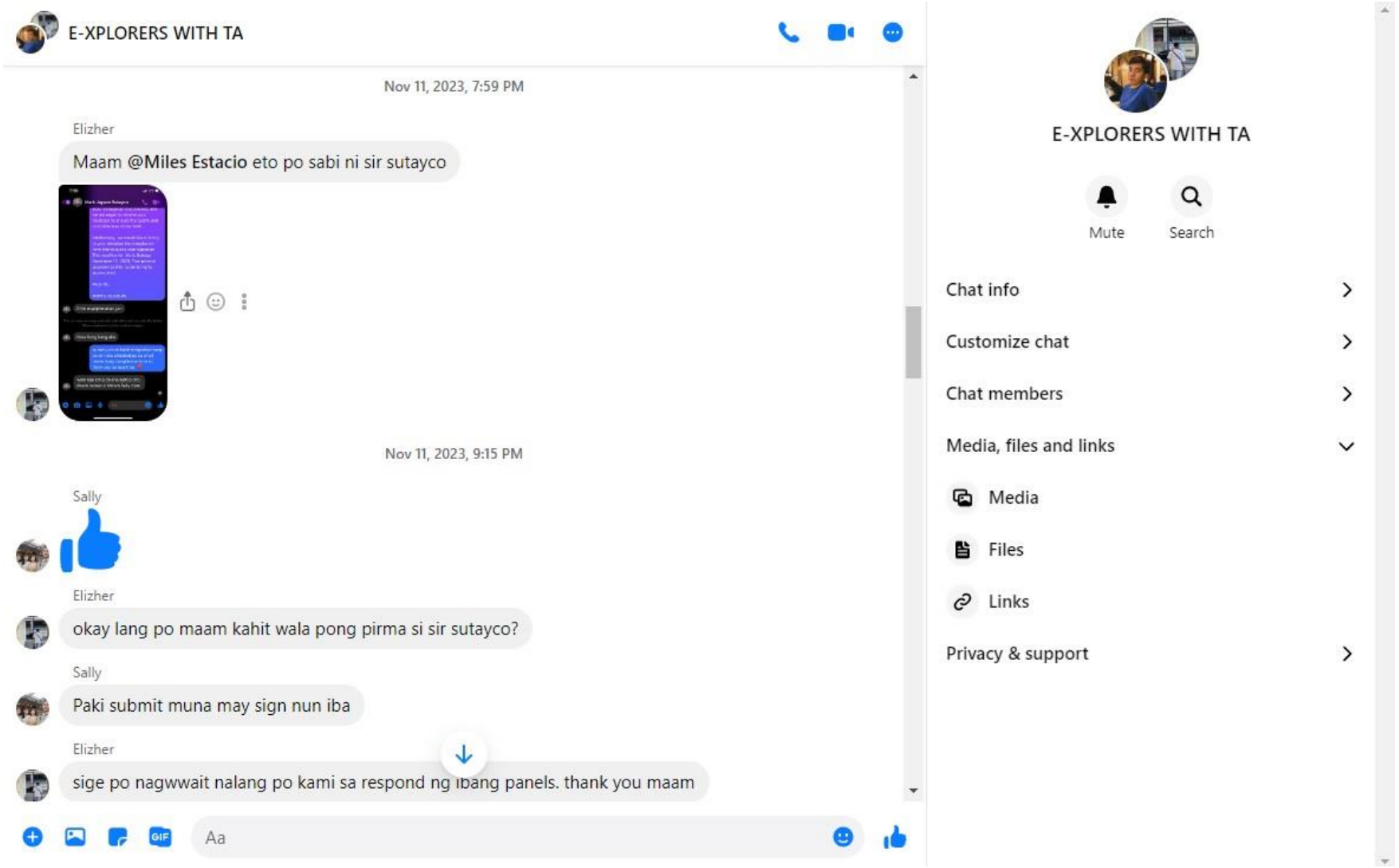
**Verified by:**



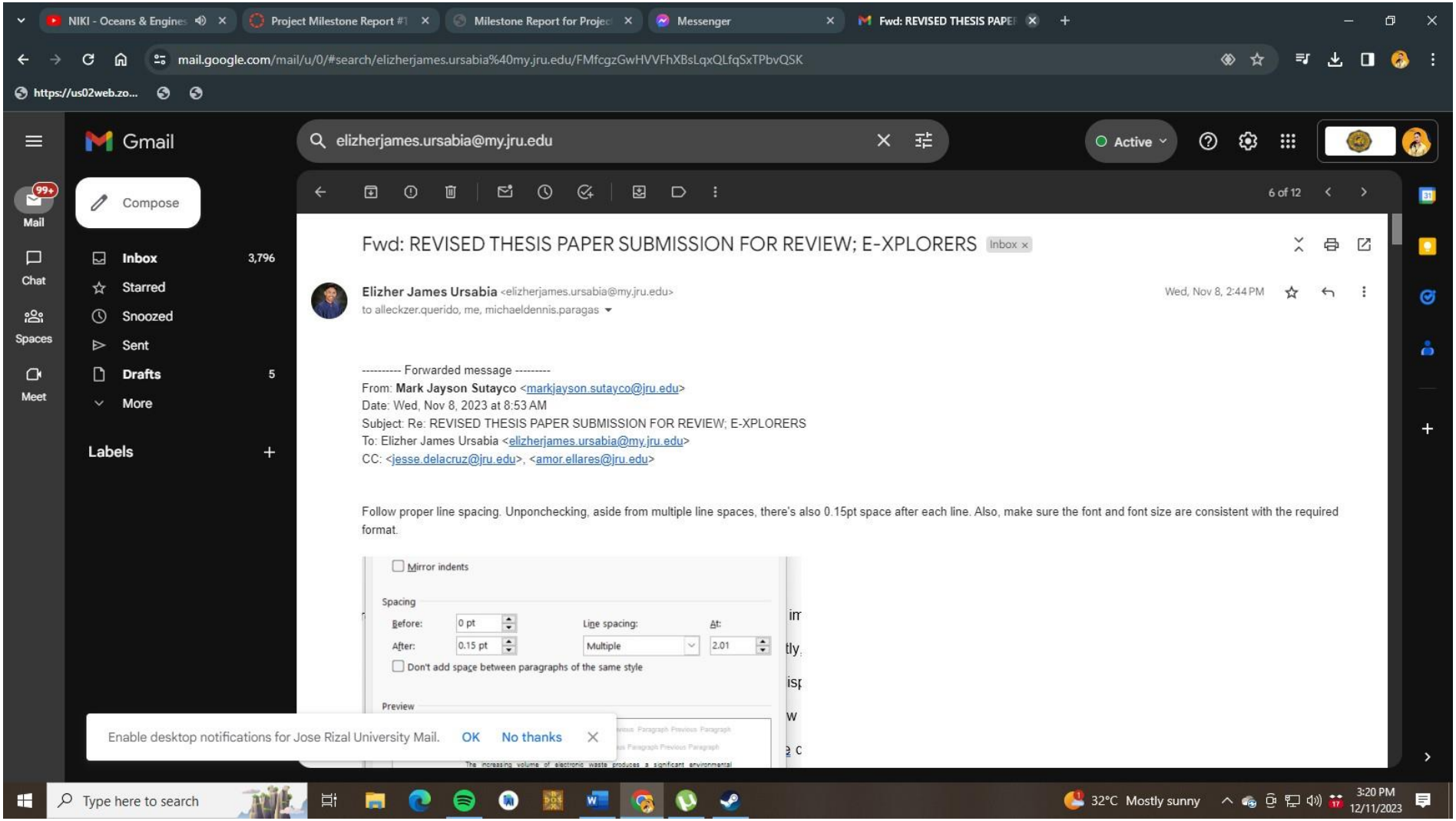
**Engr. Rosalina R. Estacio**
**Subject Adviser**
**Name & Signature/Date**

Note: This should be submitted to the Subject Adviser on weekly basis with an attachment of activity pictures pertaining to the activity stated in the report.

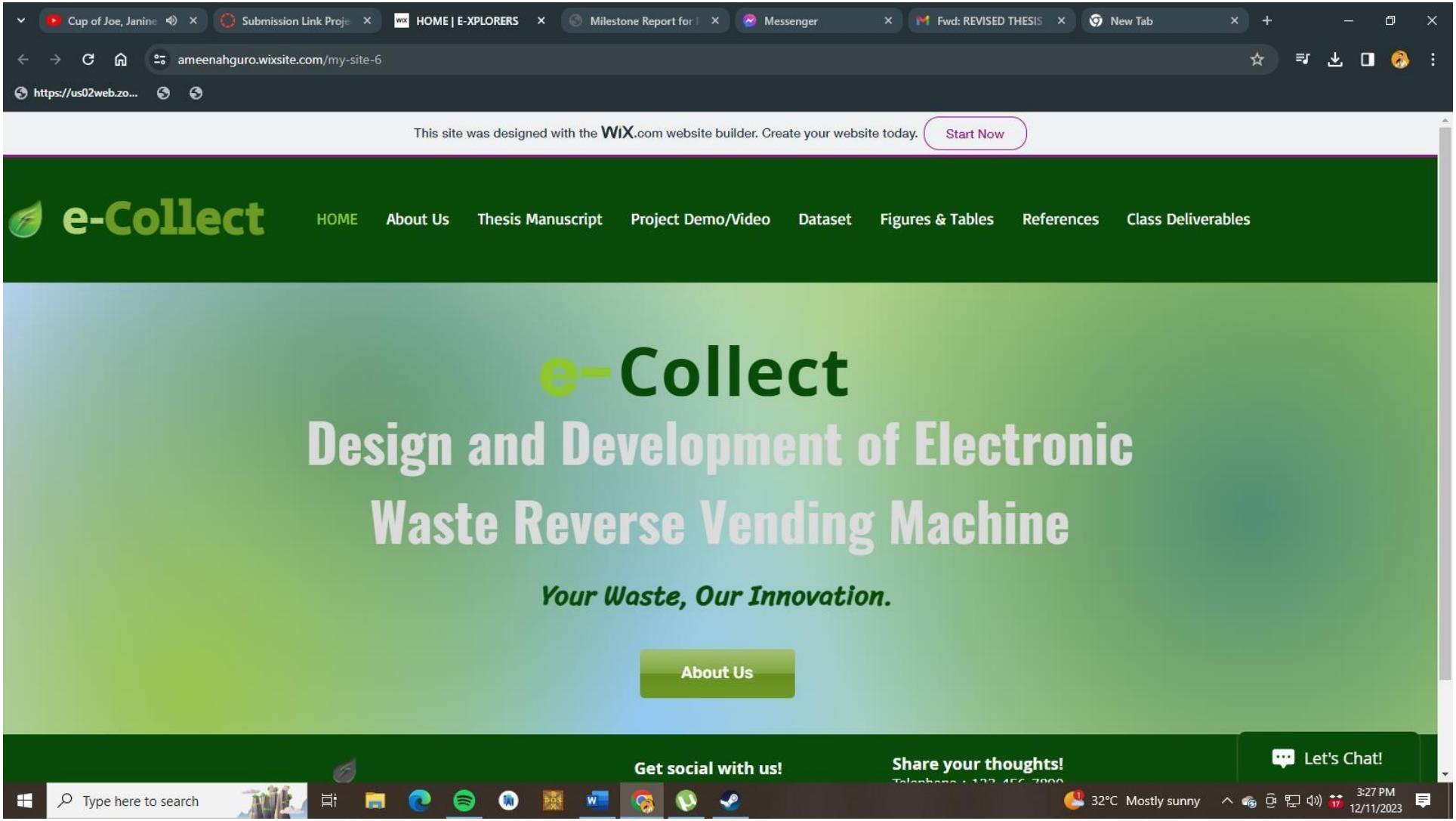
**CONSULTAION WITH THE TECHNICAL ADIVSER**



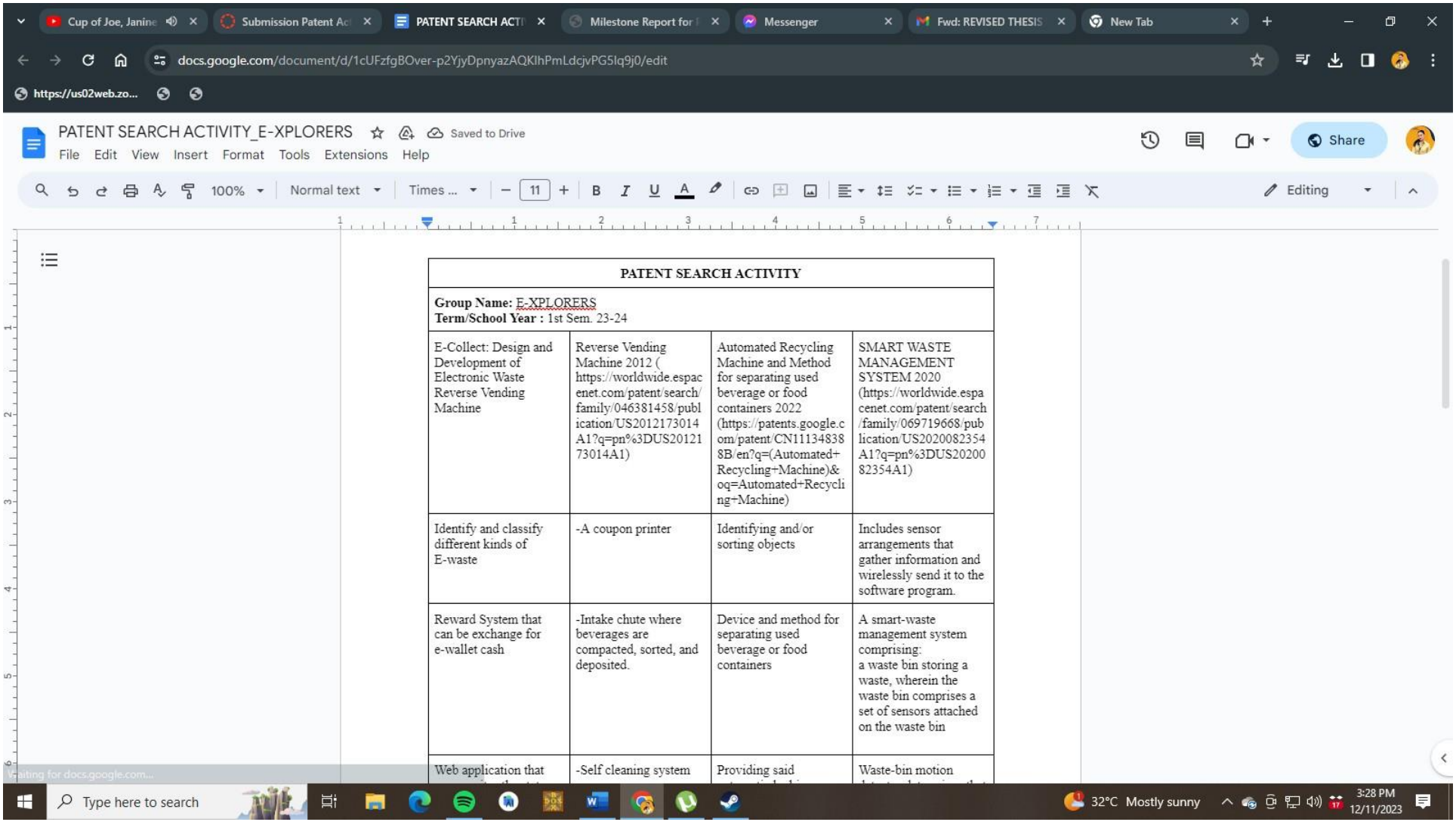
**EMAIL SENT TO THE PANELISTS**



**GOOGLE SITE LINK**



## PATENT SEARCH ACTIVITY



PATENT SEARCH ACTIVITY_E-XPLORERS

| PATENT SEARCH ACTIVITY | | | |
|---|---|---|---|
| **Group Name:** E-XPLORERS<br>**Term/School Year :** 1st Sem. 23-24 | | | |
| E-Collect: Design and Development of Electronic Waste Reverse Vending Machine | Reverse Vending Machine 2012 ( https://worldwide.espacenet.com/patent/search/family/046381458/publication/US2012173014A1?q=pn%3DUS20121730 14A1) | Automated Recycling Machine and Method for separating used beverage or food containers 2022 (https://patents.google.com/patent/CN111348388B/en?q=(Automated+Recycling+Machine)&oq=Automated+Recycling+Machine) | SMART WASTE MANAGEMENT SYSTEM 2020 (https://worldwide.espacenet.com/patent/search/family/069719668/publication/US2020082354A1?q=pn%3DUS2020082354A1) |
| Identify and classify different kinds of E-waste | -A coupon printer | Identifying and/or sorting objects | Includes sensor arrangements that gather information and wirelessly send it to the software program. |
| Reward System that can be exchange for e-wallet cash | -Intake chute where beverages are compacted, sorted, and deposited. | Device and method for separating used beverage or food containers | A smart-waste management system comprising:<br>a waste bin storing a waste, wherein the waste bin comprises a set of sensors attached on the waste bin |
| Web application that | -Self cleaning system | Providing said | Waste-bin motion |

Jose Rizal University
**COLLEGE OF COMPUTER STUDIES AND ENGINEERING**

**Project Milestone Report**

**IMPORTANT DATES:**
Initial Presentation: Week 8
Endorsement: Week 10
Final Presentation: Week 11
Revisions: Week 13 –Week 14
Final Documentation: Week 16
*Note: Schedule of re-defense subject for approval by Committee on Project*

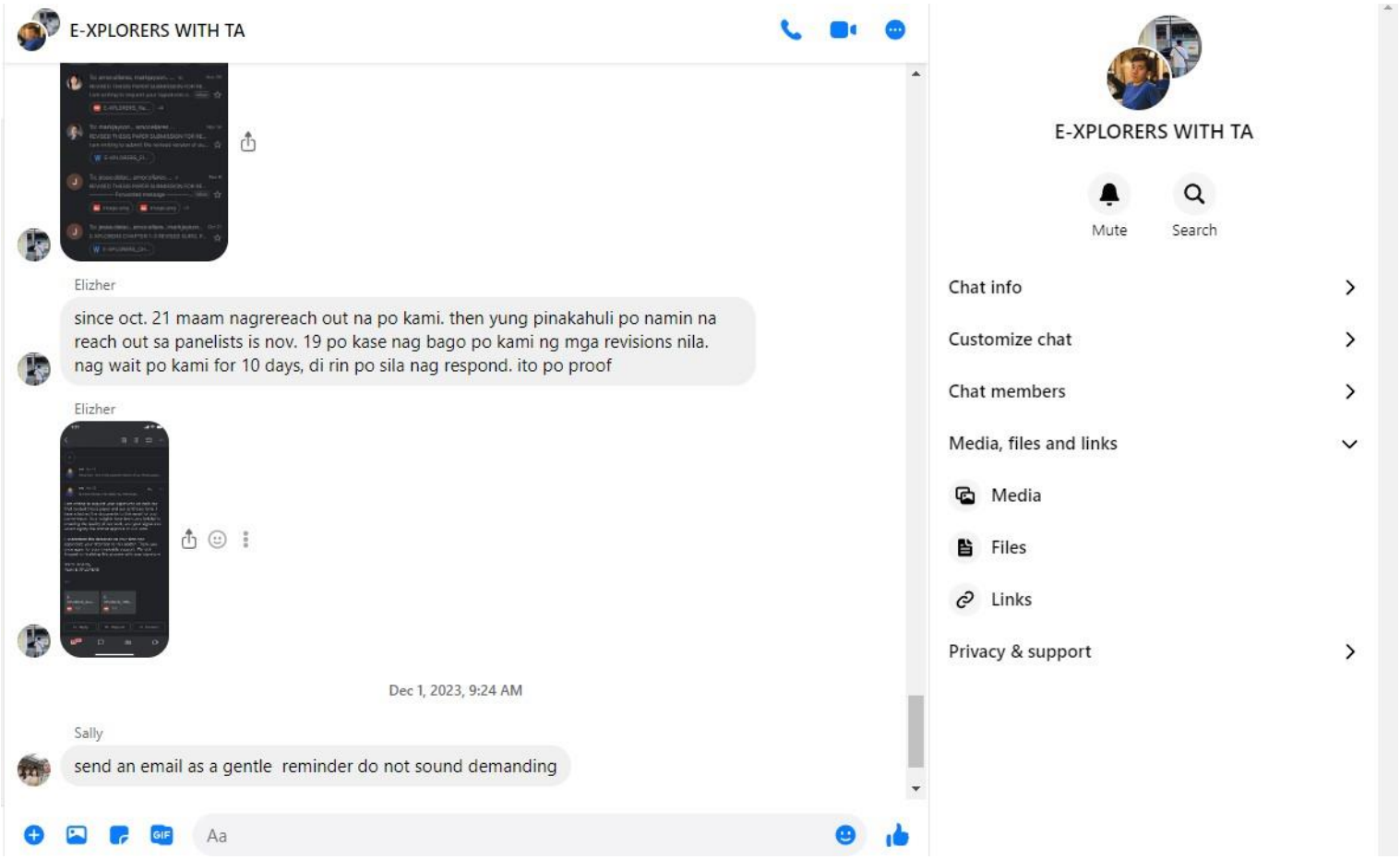
| **Group Name: E-XPLORERS** | **Code/Section: CPE C403-401G** | **Semester/SY: 1st Semester 2023-2024** | **Date: November 26, 2023** |
|---|---|---|---|
| **Members: Guro Ameenah F. \| Paragas, Michael Dennis D. \| Querido, Alleckzer A. \| Ursabia, Elizher P.** | | | |
| **Project Title: E-COLLECT: DESIGN AND DEVELOPMENT OF ELECTRONIC WASTE REVERSE VENDING MACHINE** | | | |

| **Deliverables** | **Target date completion** | **Work Accomplished** | **Issues encountered** | **Comments & Suggestions** | |
|---|---|---|---|---|---|
| | | | | **Technical Adviser** | **Subject Adviser** |
| • Compliance and Synthesis Form<br>• Bills of Materials/ Project Costing | • November 18, 2023<br>• November 29, 2023 | • The team looked for online sellers to make it easier to acquire the components needed for the development of the machine. | • The team is still waiting for the response of the panelists regarding whether the final revised paper is approved to them. | • The technical adviser advised the team to communicate with the panelists without sounding demanding for the request of signatures. | |

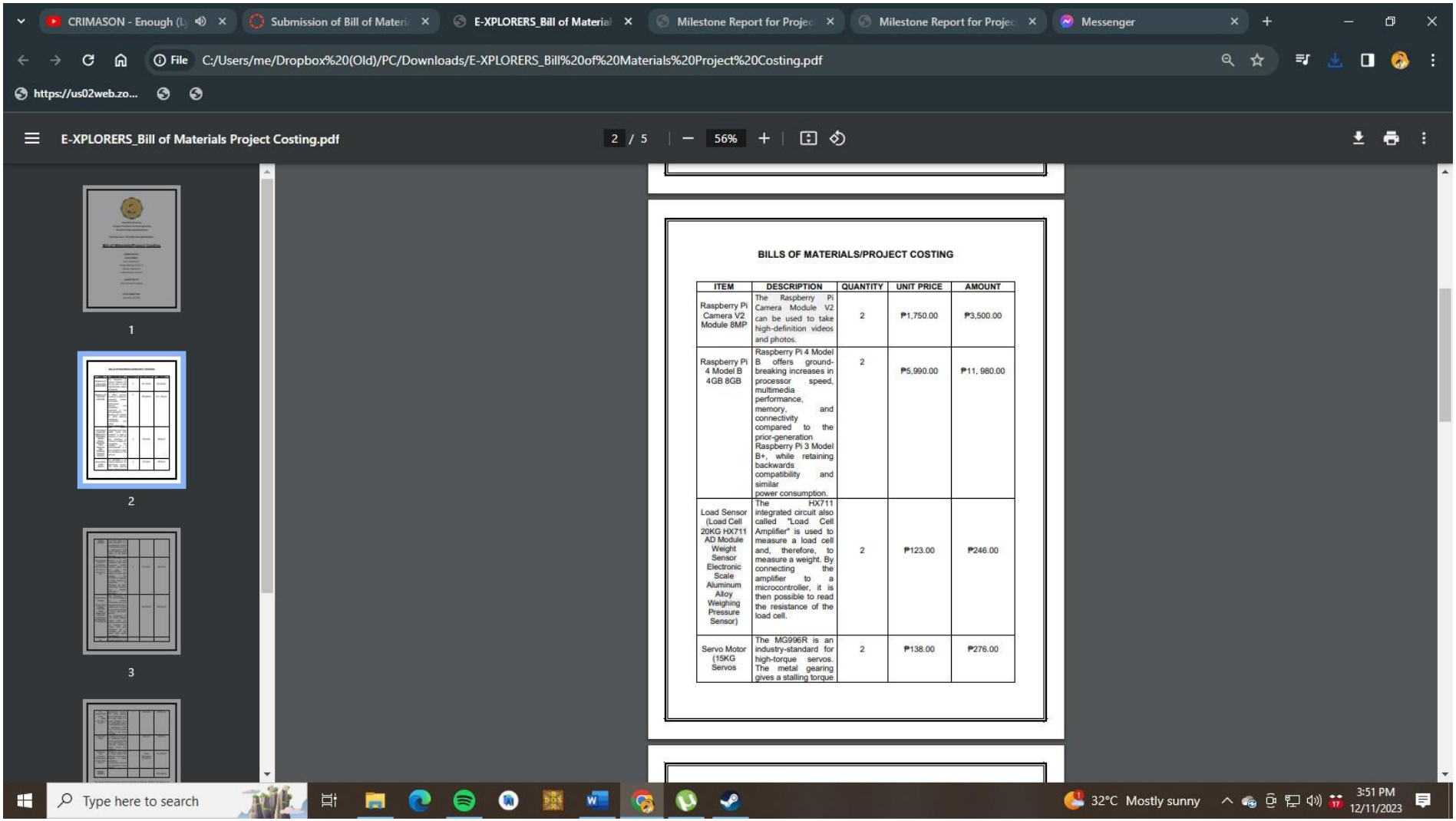
| **Submitted by:** | **Checked by:** | **Verified by:** |
|---|---|---|
| **Querido, Alleckzer A. Guro, Ameenah F.**<br>**Paragas, Michael Dennis D. Ursabia, Elizher James P.** | **Engr. Rosalina R. Estacio**<br>**Technical Adviser**<br>**Name & Signature/Date** | **Engr. Rosalina R. Estacio**<br>**Subject Adviser**<br>**Name & Signature/Date** |

Note: This should be submitted to the Subject Adviser on weekly basis with an attachment of activity pictures pertaining to the activity stated in the report.

**CONSULTATION WITH THE TECHNICAL ADVISER**



# BILL OF MATERIALS/PROJECT COSTING



Jose Rizal University
**COLLEGE OF COMPUTER STUDIES AND ENGINEERING**

**Project Milestone Report**

**IMPORTANT DATES:**
Initial Presentation: Week 8
Endorsement: Week 10
Final Presentation: Week 11
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Final Documentation: Week 16
*Note: Schedule of re-defense subject for approval by Committee on Project*

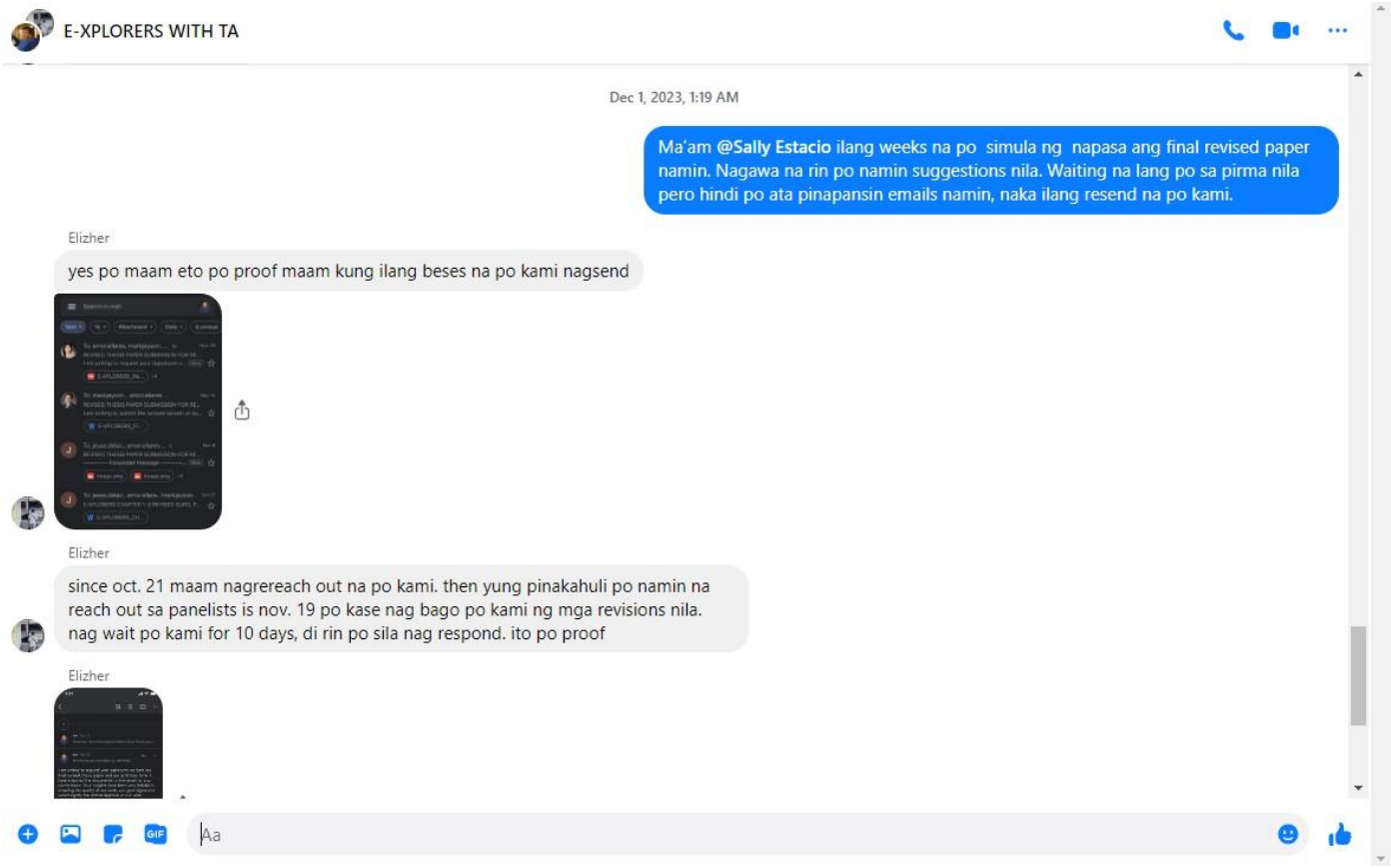
| **Group Name: E-XPLORERS** | **Code/Section: CPE C403-401G** | **Semester/SY: 1st Semester 2023-2024** | **Date: December 09, 2023** |
|---|---|---|---|
| **Members: Guro Ameenah F. \| Paragas, Michael Dennis D. \| Querido, Alleckzer A. \| Ursabia, Elizher P.** | | | |
| **Project Title: E-COLLECT: DESIGN AND DEVELOPMENT OF ELECTRONIC WASTE REVERSE VENDING MACHINE** | | | |

| **Deliverables** | **Target date completion** | **Work Accomplished** | **Issues encountered** | **Comments & Suggestions** | |
|---|---|---|---|---|---|
| | | | | **Technical Adviser** | **Subject Adviser** |
| • Compliance and Synthesis Form<br>• Draft of IEEE article<br>• Dataset creation and model development<br>• E-Collect web application | • December 09, 2023<br>• December 13, 2023<br>• December 13, 2023<br>• December 13, 2023 | • The team successfully obtained the signed compliance and synthesis form from the panelists.<br>• Finished the draft of IEEE article.<br>• Gathered the needed electronic waste dataset.<br>• Finished Initial user interface of the web application. | • The compliance and synthesis form awaited signature for a few weeks due to the busy schedules of the panelists. | • Initiate the procurement of the required components of the machine for next year's development. | |

| Submitted by: | Checked by: | Verified by: |
|---|---|---|
| **Querido, Alleckzer A.  Guro, Ameenah F.**<br><br>**Paragas, Michael Dennis D.  Ursabia, Elizher James P.** | **Engr. Rosalina R. Estacio**<br>**Technical Adviser**<br>**Name & Signature/Date** | **Engr. Rosalina R. Estacio**<br>**Subject Adviser**<br>**Name & Signature/Date** |

Note: This should be submitted to the Subject Adviser on weekly basis with an attachment of activity pictures pertaining to the activity stated in the report.

**COMPLIANCE AND SYNTHESIS FORM**



E-XPLORERS WITH TA

Elizher

since oct. 21 maam nagrereach out na po kami. then yung pinakahuli po namin na reach out sa panelists is nov. 19 po kase nag bago po kami ng mga revisions nila. nag wait po kami for 10 days, di rin po sila nag respond. ito po proof

Elizher

Dec 1, 2023, 9:24 AM

Sally

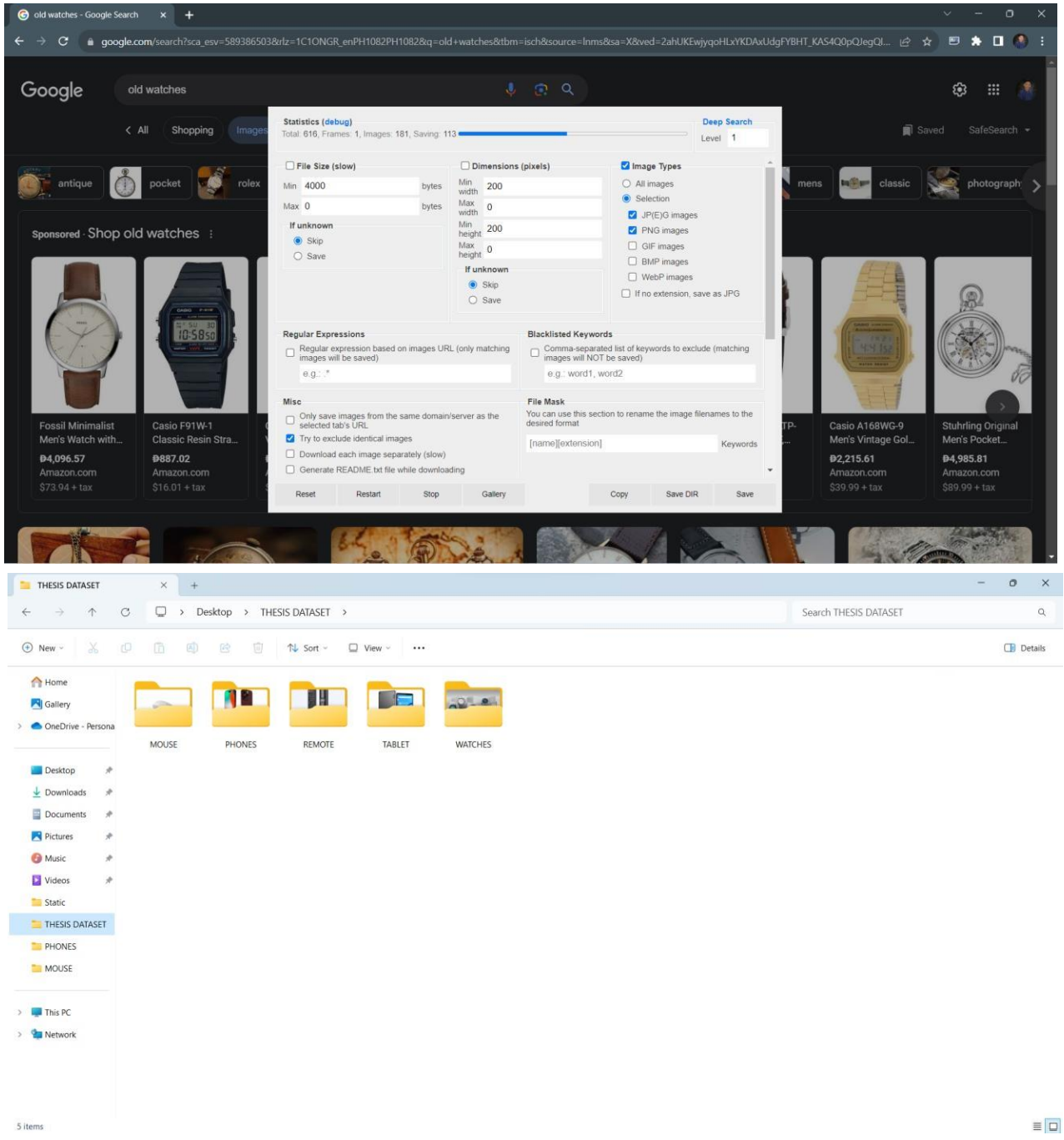
send an email as a gentle  reminder do not sound demanding

Sun 9:22 PM

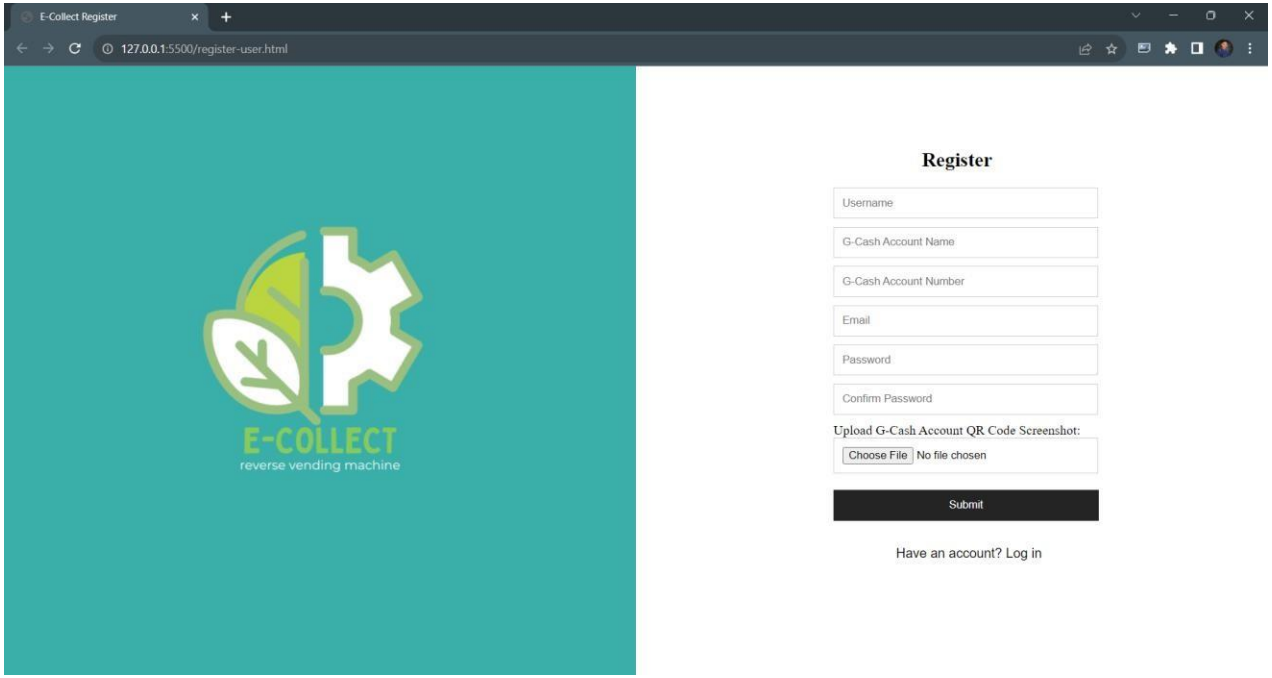
Ma'am **@Sally Estacio** wala pa rin po paramdam mga panels even po sa pm.

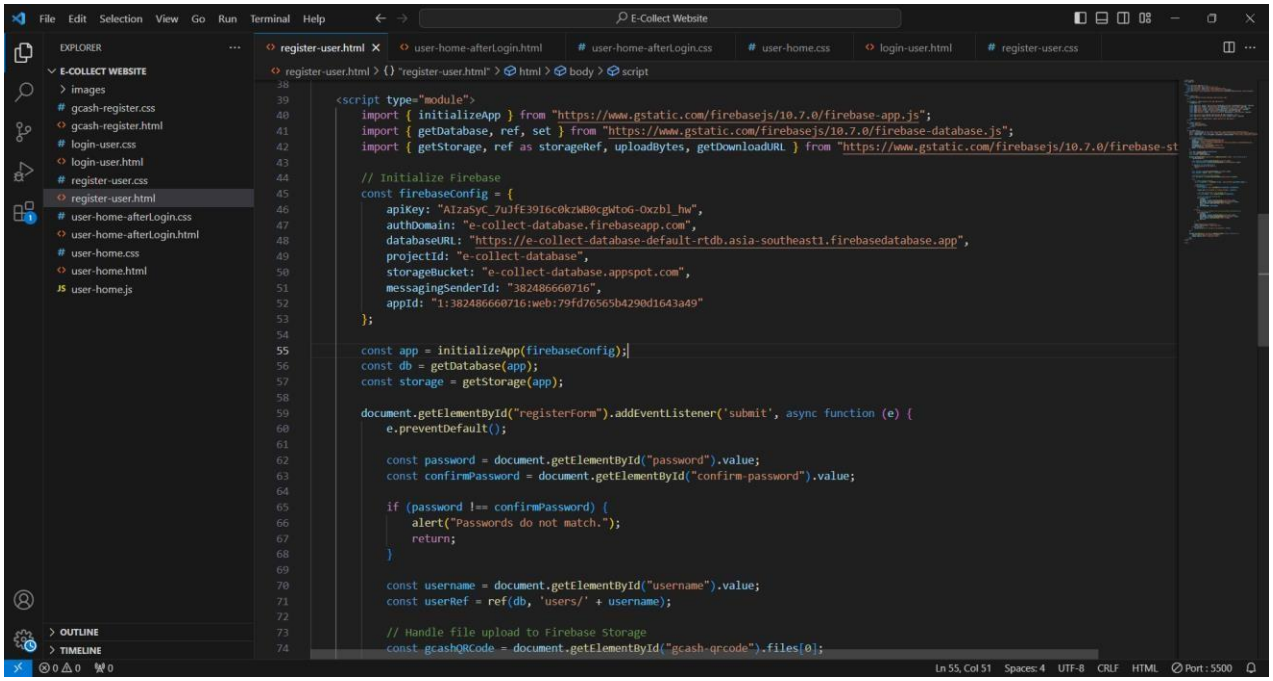
Aa

## DATASET CREATION



## INITIAL INTERFACE OF WEB APPLICATION



| GROUPS | | PANELIST RAW SCORE | | | | | | | | | | | | | | | RAW AVERAGE-GROUP | RAW AVERAGE - IND | OD-GRP-45% GRADE EQV-GROUP | IND-GRP-30% GRADE EQV-IND |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | PROB | DOC | IND | | | PROB | DOC | IND | | | PROB | DOC | IND | | | | | | |
| | | | | OP | P | K | | | OP | P | K | | | OP | P | K | | | | |
| E-XPLORERS | | ELLARES | | | | | SUTAYCO | | | | | DELA CRUZ | | | | | | | | |
| 21-258013 | GURO, AMEENAH FLORES | 3.75 | 3.5 | 4 | 4 | 4 | 3.25 | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 3 | 3 | 3.4 | 3.7 | 2.6 | 2.4 |
| 19-403433 | QUERIDO, ALLECKZER ALOLINO | 3.75 | 3.5 | 4 | 4 | 3 | 3.25 | 3 | 4 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 3.4 | 3.4 | 2.6 | 2.6 |
| 20-256380 | PARAGAS, MICHAEL DENNIS DELA GRACIA | 3.75 | 3.5 | 4 | 4 | 4 | 3.25 | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 3 | 3 | 3.4 | 3.7 | 2.6 | 2.4 |
| 19-403380 | URSABIA, ELIZHER JAMES PERUCHO | 3.75 | 3.5 | 4 | 4 | 3 | 3.25 | 3 | 4 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 3.4 | 3.4 | 2.6 | 2.6 |

Jose Rizal University
**COLLEGE OF COMPUTER STUDIES AND ENGINEERING**
**Computer Engineering Department**

# ADVISER ACCEPTANCE FORM

**To:** Engr. Rosalina R. Estacio
**NAME OF TECHNICAL ADVISER**

Hereby accepts the proponent's project study:

E-XPLORERS
**Group Name**

1. Guro, Ameenah F.
2. Paragas, Michael Dennis D.
3. Querido, Alleckzer A.
4. Ursabia, Elizher James P.

As project study advisees for their study.

**ElektroMatik: Electronic Waste Machine with Reward System**
Title of the Project Study

Sub-System 1

Sub-System 2

Sub-System 3

For the School Year: 2023-2024

CONFORME:

ENGR. ROSALINA R. ESTACIO /08-29-23
Signature of Adviser Over Printed Name