E-LEARNING: DISASTER PREPAREDNESS

A Capstone Project

Presented to

The Faculty of the College of Computer Studies

Lyceum of the Philippines University – Batangas

In Partial Fulfilment

Of the Requirements for the Degree

Bachelor of Science in Information Technology

(Specialized in Multimedia Technologies)

By:

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March 2017

APPROVAL SHEET

In partial fulfilment of the requirements for the degree Bachelor of Science in Information Technology (Specialized in Multimedia Technologies), this capstone project titled "**E-learning: Disaster Preparedness**" is submitted by **Christian P. Delen, Roy Rafael Garcia, Glendill Mark C. Mulingtapang** and **April O. Sandoval** and is hereby recommended for oral examination.

_____

Mrs. Irene L. Balmes, MSIT
Adviser

Defended in an oral examination before a duly constituted panel with a grade of _____.

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Mrs. Roselie B. Alday, MCS, Phd. Cand.
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To the Almighty God, for giving the researchers the knowledge and strength to accomplish this work.

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To our entire panellists, for the comments and suggestions that they added to enhance this project to be able to make it more reliable.

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To our relatives, loved ones, friends and classmates, who motivated us to work hard in this project and also for bringing joy and laughter through the hard days of this project. Thank you very much.

Christian

Roy Rafael

Glendill Mark

April

DEDICATION

We dedicated this project to our parents who gives us emotional, psychological and financial support who gave his/her best to finish this study.

We also dedicated this study to their friends and loved ones who inspired us in fulfilling our goals.

To our respective professors in College of Computer Studies, we dedicate this research, since without them; this work will not have been possible.

Lastly, to the Almighty God, who gives us the power, strength and patience to finish this project.

Christian

Roy Rafael

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E-learning: Disaster Preparedness

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ABSTRACT

In this paper, the researcher built a learning environment that combines "e-Learning", "multimedia" and "disaster preparedness". The feasibility of an e-learning website to become an interactive e-learning website was studied. Furthermore, an interactive e-Learning website that gives information about the ways or strategies on how to deal with disasters was developed. Therefore, a familiar and easier learning experiences which can be created by developing this interactive e-Learning environment is expected. Thus, the quiz provided in the e-learning website is helpful for them to know what ideas or information they got from the website. The result of this research considers the interactive e-learning website essential for the dissemination of the information about Disaster Preparedness.

Keywords: *disaster, e-learning, multimedia, preparedness*

1.0 INTRODUCTION

Today, our society all over the world are working online, either taking some transactions or conducting trainings, which is often called "e-learning". E-learning provides suitable quality training to the people especially the students. It has the authority in extending education and training, creating a new world of possibilities for economic development, profitability, and prosperity. It is developed as the primary mode to disseminate knowledge not only to students but also to other professionals in the corporate world. Moreover, technology is used in different ways like in communication, research, and in education. The letter "e" which stands for electronic is now widely referred to as the word that describes the application of the electronic system with the aid of a computer combined with the internet.

Hence, this study aimed at teaching and helping PDRRMC employees, teachers, students and our society about Disaster Preparedness which is considered as one the most important skills every individual should be familiar with. Disaster Preparedness is important for the community to know what must be done in time of disasters.

The researchers concluded that aside from being suitable for all different types of learners; it must also be easy and very be accessible anytime. Improvement can also be done if the PDRRMC-Batangas will use this as a learning tool to disseminate information about Disaster Preparedness.

The study entitled “E-learning: Disaster Preparedness” is designed to primarily give complete and timely information about Disaster Preparedness. It would enhance the learning ability of PDRRMC employees, teachers and students to improve their know how regarding the said situation.

On the other hand, NDRRMC or National Disaster Risk Reduction & Management Council is a government agency assigned to mitigate disaster occurrences in the Philippines. Its mission is to implement leadership and administration of national civil defense and disaster risk reduction and management by 2020.

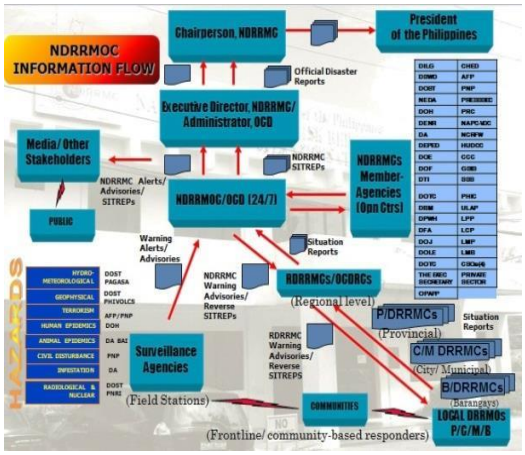


Figure 1: Flow Diagram of How NDRRMC Works with the other Government Agencies

According to NDRRMC this Flow Diagram shows how information from the surveillance agencies are processed and developed into NDRRMC Advisories, Situational Reports, and Official Disaster Reports, providing decision-makers with valuable information and knowledge. The processed information from the NDRRMOC also serve as bases for appropriate response or actions to be taken by the community at risk, local DRRMCs, and other response agencies. NDRRMOC processes warning, alert, advisories and bulletins coming from the surveillance agencies such as PHILVOCS, PAGASA, AFP, DOH, PNP, DA, and PNRI. The Chairperson will prepare for memo and submit it through the Executive Director and after all the local, regional and national disaster risk reduction management transfer all the documents and information needed the Chairperson will again prepare for memo and have it signed by the Executive Director and after that they will submit report at the President therefore they found some alternative ways on how to disseminate information in a real-time approach. One of which is through the use of Internet or a web-based training course. [1]

For those involved in Disaster Personnel or Staff, it is important to promote the use of e-learning because of its impact in improving the people’s awareness with regard to Disaster Preparedness.

1.1 Objective of the Study

The purpose of this study is to disseminate information about Disaster Preparedness. Thereby, it sought to aim the following objectives:

1. To develop an E-learning about Disaster Preparedness, that will help the staff or employees of

NDRRMC/PDRRMC in order to prepare and mitigate for the upcoming disasters.

2. To design an interactive e-learning with instructional videos for the better learnings of the potential users.
3. To boost the users' mental agility in responding to the given "E-learning: Disaster Preparedness" quizzes.

1.2 Scope and Limitation of the Study

This E-learning about Disaster Preparedness is consisted of five chapters:

Chapter 1- The Introduction; Chapter 2- The Review of Literature; Chapter 3- The Research Methods; Chapter 4- The Results and Discussion; and Chapter 5- The Summary

Chapter 1 discusses about the Introduction, define E-learning, how E-learning affects the society today, the importance of this study and the techniques to improve this software. At the end of this chapter the reader is expected to: Know the nature of E-learning and appreciate the importance of E-learning: Disaster Preparedness.

Chapter 2 provides information about E-learning, Disaster Preparedness, and Multimedia. At the end of this chapter the reader is expected to: Know the difference of E-learning, Disaster Preparedness and Multimedia. The reader will also be informed about the different published and unpublished research works related on this topic

Chapter 3 focuses on Research Methods. The Research Design, Research Participants and Research Procedures. At the end of this chapter the reader: shall have understood the Web Development Life Cycle(WDLC) that the researchers used in order to come up with this E-learning, the participants of the study and also the Procedure that the researchers used to construct this research.

Chapter 4 discusses the Results and Discussion. At the end of this chapter the reader: shall have known the interface that the researchers had used, the designs, the text, pictures, animations, and videos that the researchers created to construct this E-learning.

Chapter 5 discusses about the Summary,Conclusion and Recommendation. At the end of this chapter the reader: shall have known a brief statement about E-learning Disaster Preparedness.

The researchers have a Login Window that enables the user to create an Account first before entering the Quiz Window.

The quiz is provided by the researchers to test the users improvement in dealing with Disaster Preparedness.

The entire E-learning software will be HTML & PHP based. The researchers used XAMPP to develop the HTML & PHP pages for the E-learning. The researchers used Powtoon which is cloud-based software (SaaS) for creating animated presentations and animated videos to satisfy the users' needs.

This interactive e-learning website can only be utilized for Android users, but cannot be used by IPhone users or for IOS. It has basic information about Disaster and how to prepare and deal with it. In order for the others to view this e-learning website they must be

connected to the same network/connection.

1.3 Importance of the Study

This study enables PDRRMC employees, teachers and even the students to minimize the difficulties encountered in learning the Basic information about Disaster Preparedness. This tool lessens the time spent in studying since it provides a much better interface. The main purpose of this study is to help PDRRMC employees, teachers and students in learning, appreciate, and applying all the instructions about basic disaster preparedness given in this e-leaning. This tool serve as a guide for them to follow the information on how to deal with Disaster Preparedness. On the part of the PDRRMC employees, it can provide a teaching tool for them to inform the society about Disaster Preparedness. For the users, especially the students, to learn about Disaster Preparedness by applying what they have studied in this E-learning tool.

Furthermore, the researchers' skill in the application HTML and PHP were developed and enhanced. For the future researchers, this study serves as the reference material if they prefer to do similar study.

2.0 LITERATURE REVIEW

2.1 Conceptual Literature

E-learning or Electronic learning is the most cost-effective way of providing quality education to the users. It is a broad term for all technologically supported learning used in a set of teaching and learning tools that utilize electronic media such as audio, videotape, video-teleconferencing, phone, satellite broadcast and the most commonly recognized form of web-based education/training that is also often referred to as online courses. (Sardjana, Djafja A., 2010) [2]

Preparedness is defined as "a continual cycle of planning, organizing, training, equipping, exercising, evaluating, and taking corrective action to assure effective coordination during incident response" (DHS/FEMA). This cycle is one element of a wide-ranging National Preparedness System to prevent, respond to, and recover from calamities especially natural disasters. [3]

E-Learning or the Multimedia Web-Based Training is designed to give related informations with images, videos, and other multimedia devices so that the people can easily understand.

Multimedia, however, is a combination of text, audio, video, and animated graphics. It provides easy access to huge quantities of information, such as training manuals, dictionaries, and encyclopaedias. By early 1990s, multimedia had begun to change the modern technology specially the computer, because it plays a very important role for communication, education, and entertainment. [4]

2.2 Research Literature

A study conducted by Bendimer ad (2014) about E-learning entitled "The Natural Disaster Risk Management Program (NDRMP)"Bendimerad, is an e-learning program. It is a partnership between the World Bank's Global Facility for Disaster Reduction and Recovery (GFDRR) and EMI is launching its eight years by offering a total of ten (10) e-learning courses. The NDRMP aims at enhancing the human resources for disaster risk reduction and urban resilience. [5]

An E-Learning in Japan that was named “CEDACHeLi”, an abbreviation of CEDACH e-Learning for information processing. CEDACH established an e-Learning system, or an online self-learning environment in July 2012 to provide a chance to acquire knowledge, technical skills, and practical tips on information processing during the rescue operations of natural disasters and calamities. [6]

Another research entitled “E-Learning Tools for Public Awareness Programme Education in Disaster Risk Management: a case study of the City of Cape Town Disaster Risk Management Centre” by Kabaka, M. & Stoltenkamp, J. (2013). It aims to look at how eLearning as an ICT tool can be merged into the implementation of Public Awareness Education Programme (PAEP), so as to target large audience and create an increased capacity building of the City of Cape Town (CoCT). The examination considers providing tools that are obtainable, reliable, flexible and adaptable among the residents so as to reach the middle class levels where communities are mostly affected. . [7]

Another e-learning is “The Flood Manager E-learning Platform” which is a web-based resource that presents the state of the art knowledge in understanding and implementing Integrated Flood Management and provide the possibility to get exposed to the interdisciplinary features of flood management that enable to interact positively with specialists in this field which the users would have to deal with. [8]

Another one is the “Frailty, Dementia and Disasters: What Health Care Providers Need to Know”. The purpose of the e-learning tool is to provide the international community to reduce the liability of older adults in emergencies and disasters.[9]

The European Master’s Degree in Disaster Medicine (EMDM): A Decade of Exposure. Stated that, the e-learning platform plays the most important role as a unique means of communication and information transaction. Electronic learning has been widespread in demonstrating to a valid and productive educational method for students. [10]

In the research paper, “USING MULTIMEDIA TECHNOLOGY TO SCALE UP DISASTER RISK MANAGEMENT TRAINING” by Katalin Demeter it mentioned that the objective of the courses is to subsidize disaster risk management by increasing awareness and advancing the skills and professional knowledge of development in specific areas of disaster risk management. [11]

The third UN World Conference on Disaster Risk Reduction (WCDRR) held in Sendai, Japan on March 14-18, 2015 discussed that, in the scheme of this Conference, UNITAR together with UNISDR launched the e-learning course “Urban Risk Reduction: Developing and Implementing Resilience Action Plans for Cities”. The course aims to build up the capacities of government officials, especially those at the local level, and disaster management professionals to plan and implement programs that reduce disaster risk and enhance urban resilience. [12]

The United Nations Economic and Social Commission for Asia and the Pacific or ESCAP has launched an ingenious online e-learning platform to help countries in the region which has the world's most disaster-prone that build their capacities to cope, adapt to and

recover from natural disasters and calamities.

The Geo-Referenced Information Systems for Disaster Risk Management (Geo-DRM) portal gives state-of-the-art courses on space technology, together with Geographic Information System (GIS) applications for early warning and multi-hazard risk assessment. [13]

3.0 METHODOLOGY

3.1 Research Design

The Researchers used the Web Development Life Cycle (WDLC). Web Developing is forming a website for the world using different kinds of programming and designing technology. It enabled the team to work effectively and upgrade with a standard procedure designed to endorse for future project reviews and quality maximization. The life cycle includes the following phases: planning, analysis, design and development, testing, and implementation and maintenance.

3.2 Research Participants

In this study, some participants helped the researchers to gather information and extended their assistance Mrs. Irene Balmes, the research adviser guided the researchers in conducting the study Mrs. Roselie Alday, the dean of the College of Computer Studies, who approved the researchers' proposal.

The PDRRMC-Batangas were also very helpful in providing the relevant information that the researchers needed.

3.3 Research Procedures

The researchers first collected data and information about Disaster Preparedness and E-learning. They also figured out how multimedia is used in E-learning. They got bits of advice from their Capstone adviser, Mrs. Irene Balmes and because of that, they came up with the mapping of their research that made it easier for them to collect and gather data. Most of their information is from the Internet, but they still used books and other Published Capstone Projects that are related to their topic. They first submitted Chapter 1: Introduction.

The researchers made an interview with the PDRRMC-Batangas regarding E-learning: Disaster Preparedness. Most of the employees, agreed that it would be very helpful to have an E-learning for Disaster Preparedness.

When they finished Chapter 1, they started doing Chapter 2: Review of Literature. They searched published Researches, Papers and Capstone Projects for them to build and come up with Chapter 2.

After Chapter 2 they proceeded on doing Chapter 3: Methodology. Methodology includes Research Design, Research Participants and Research Procedures.

Lastly, after they finished working on Chapter 1 to Chapter 3 they started doing Chapter 4 which is the Results and Discussion and Chapter 5 which includes Summary, Conclusion and Recommendation.

FLOWCHARTS

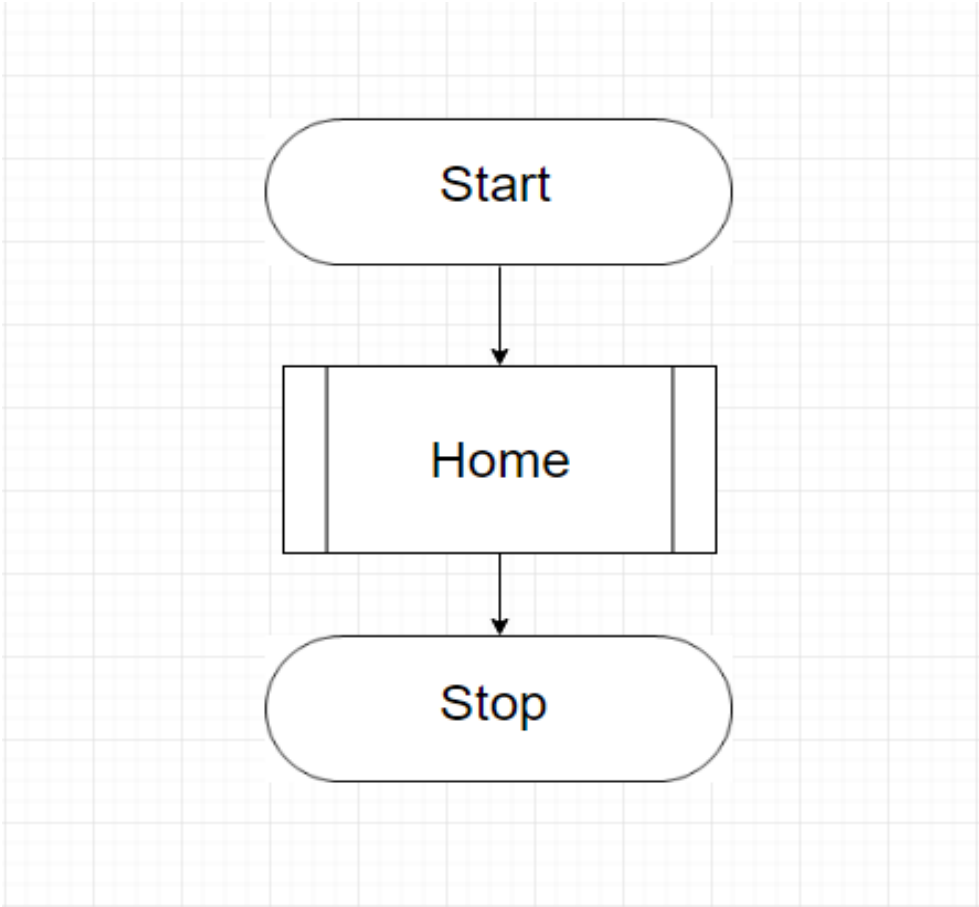


Figure 2. Home

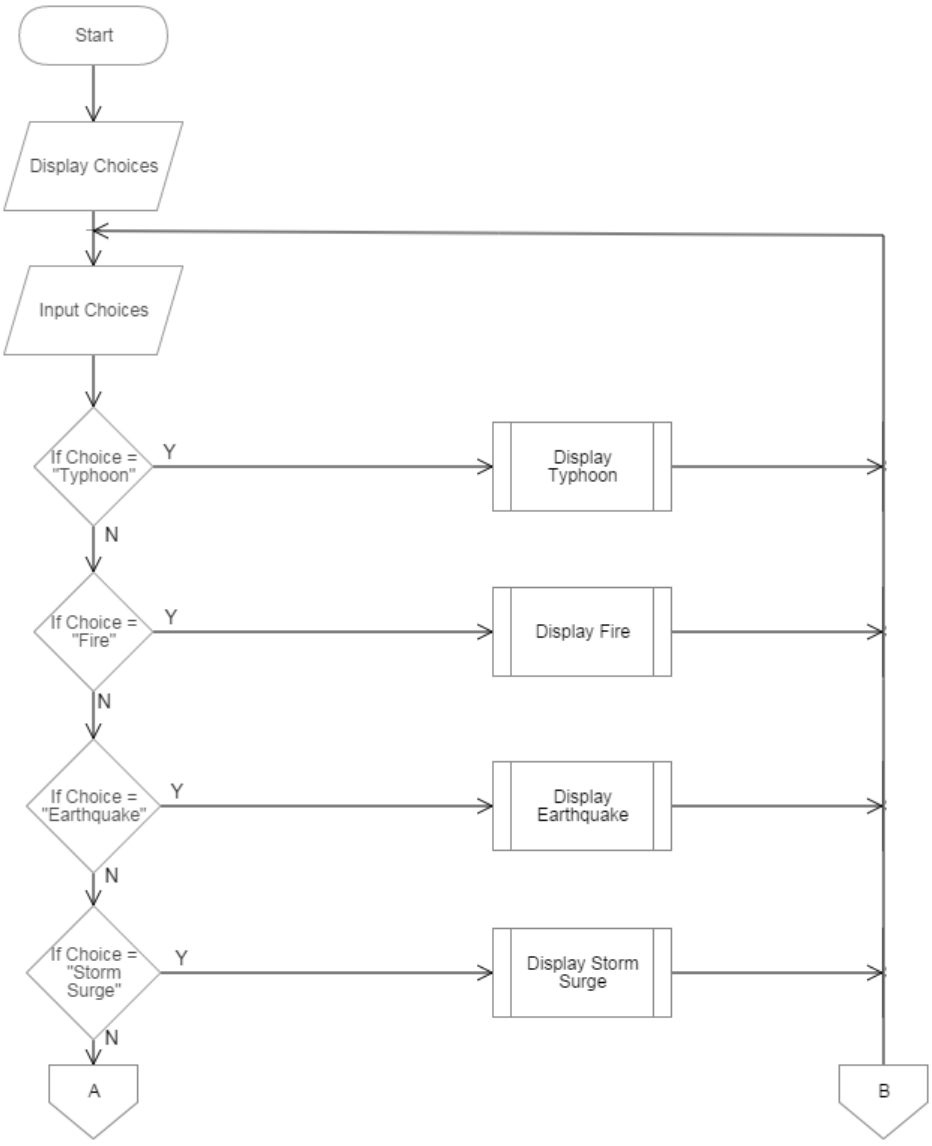


Figure 3. Home Page

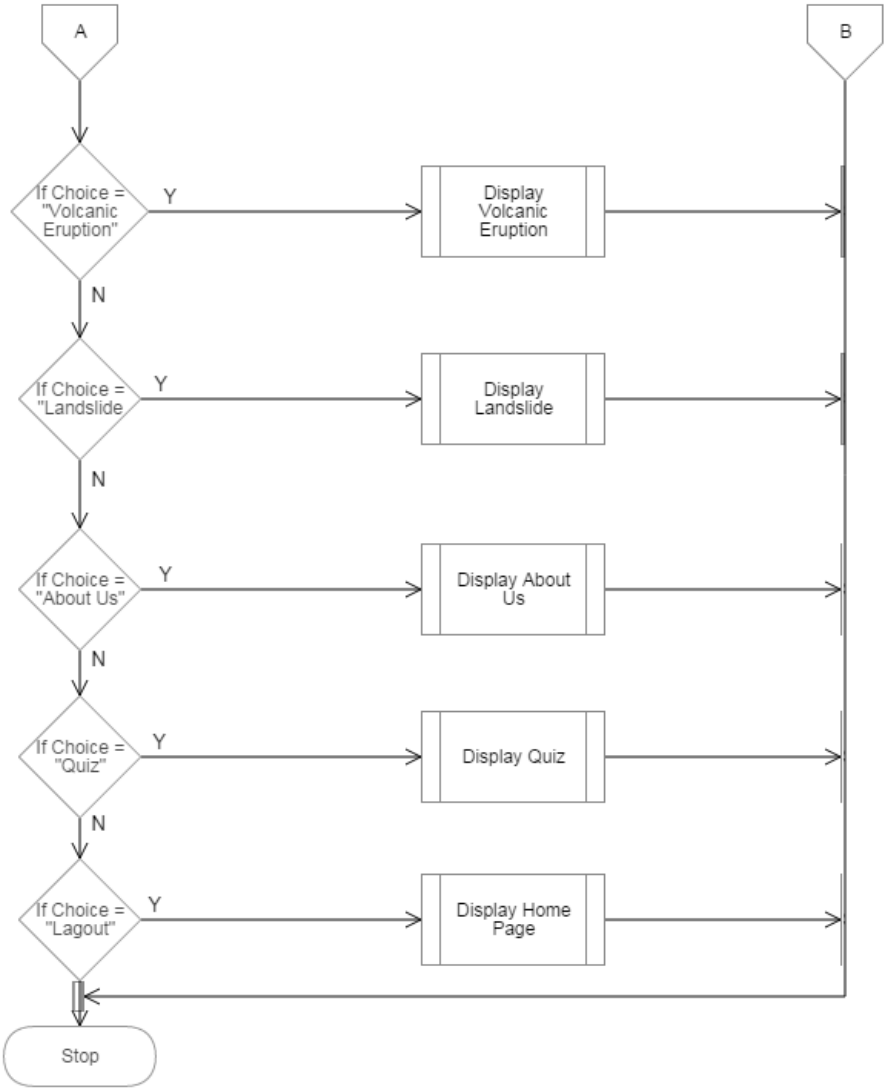


Figure 4. Home Page (Continuation)

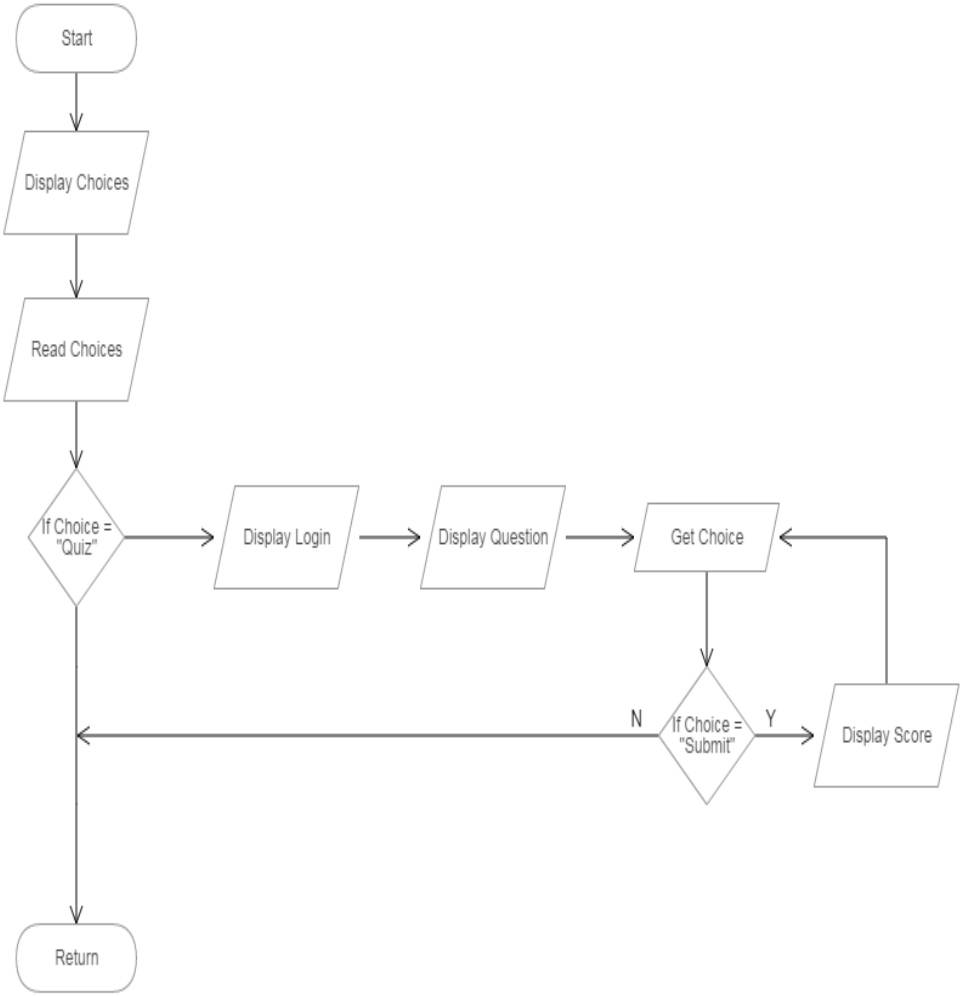


Figure 5. Quiz

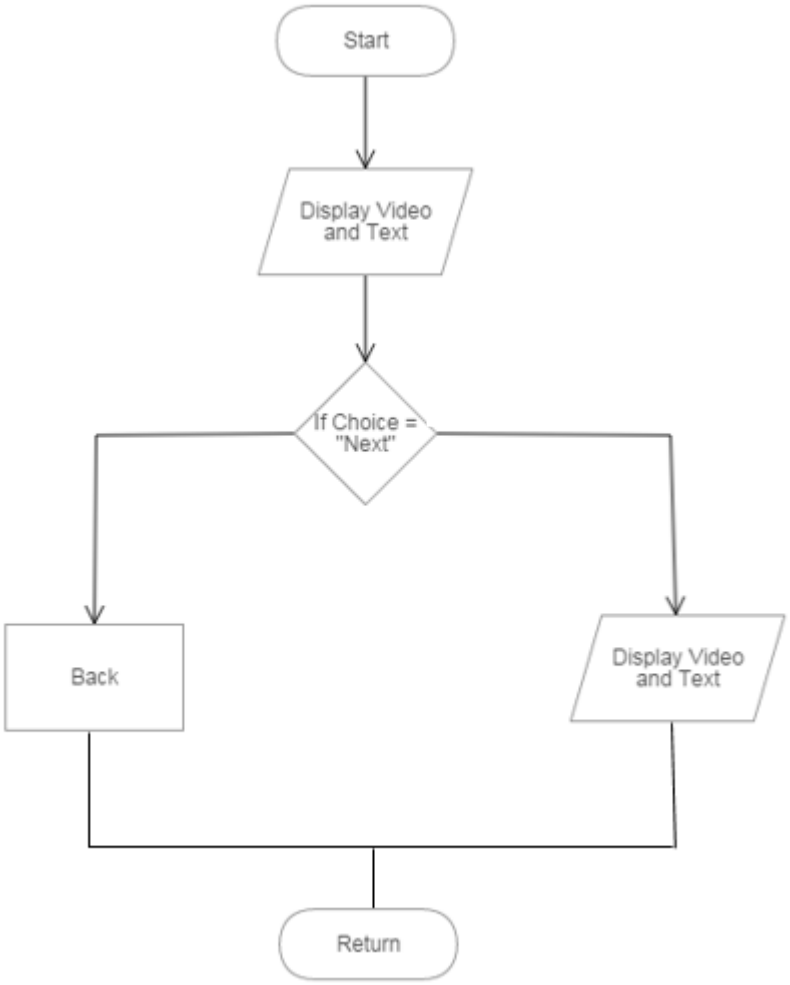


Figure 6. Typhoon

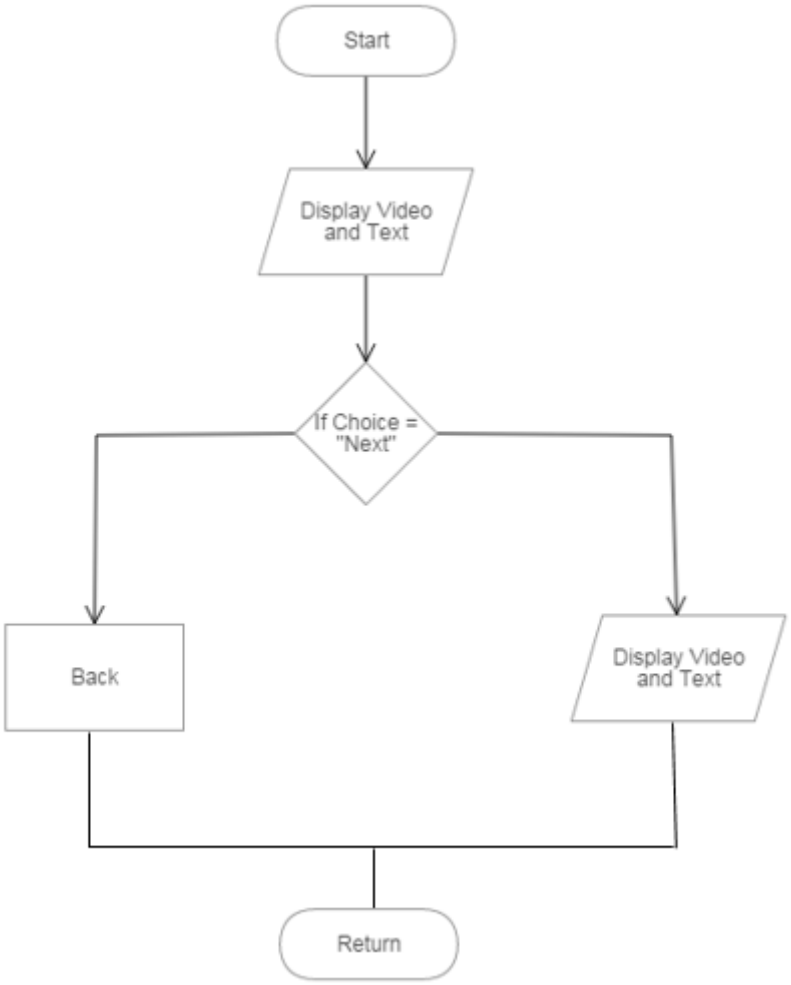


Figure 7. Fire

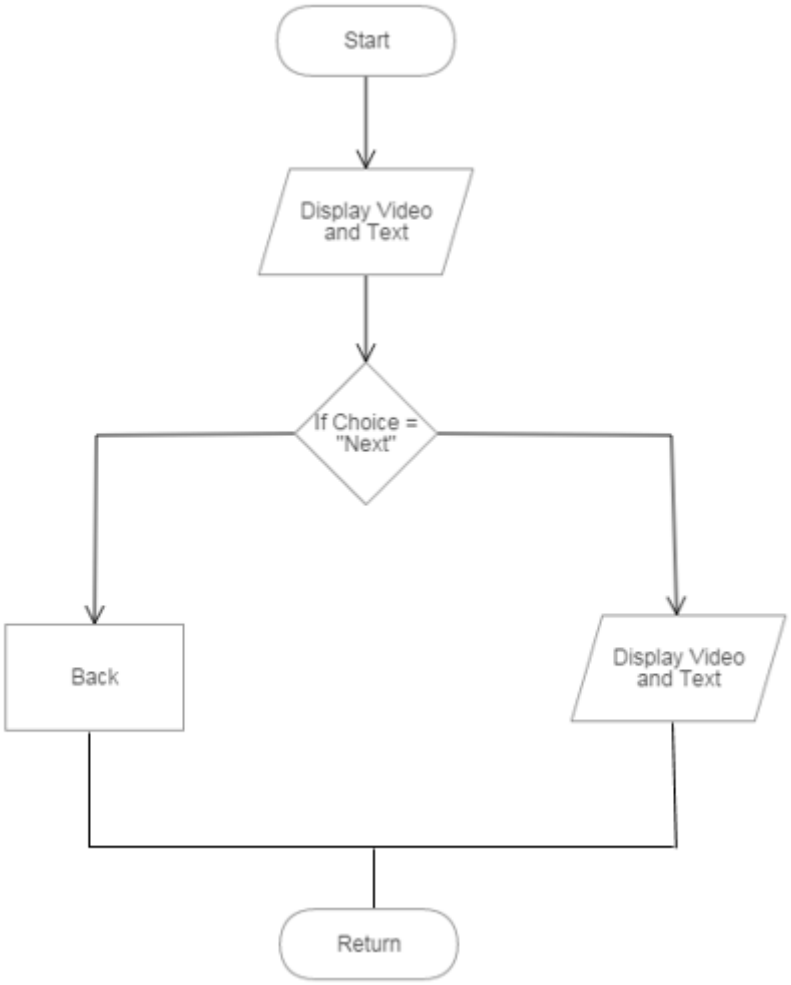


Figure 8. Earthquake

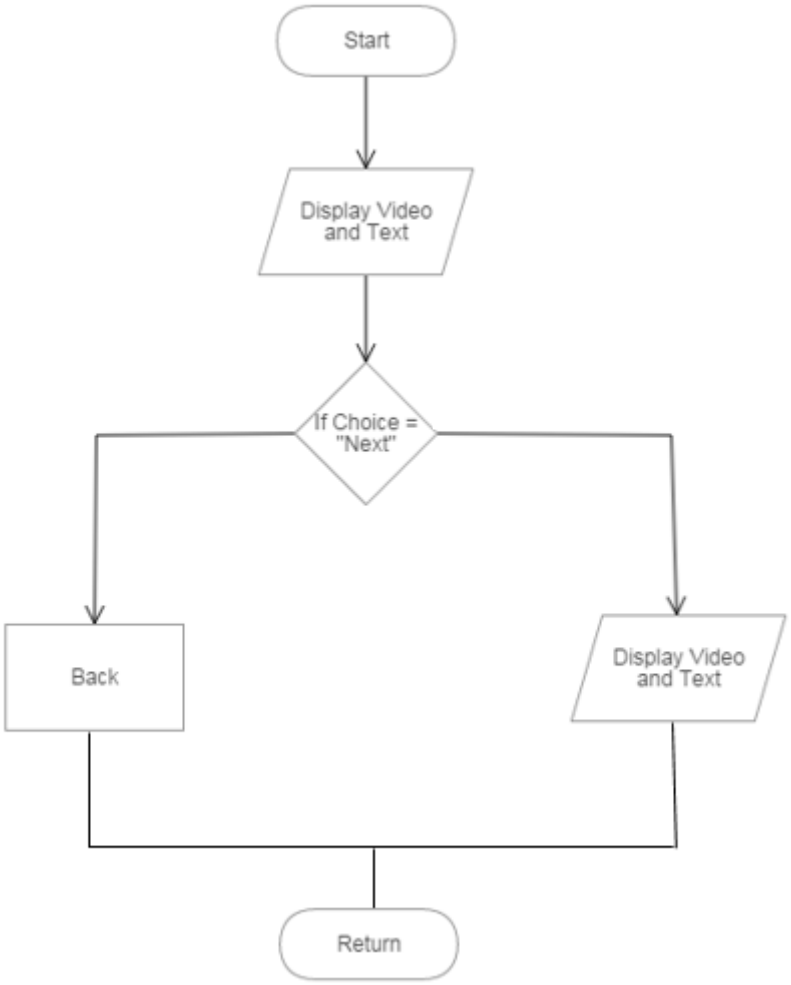


Figure 9. Storm Surge

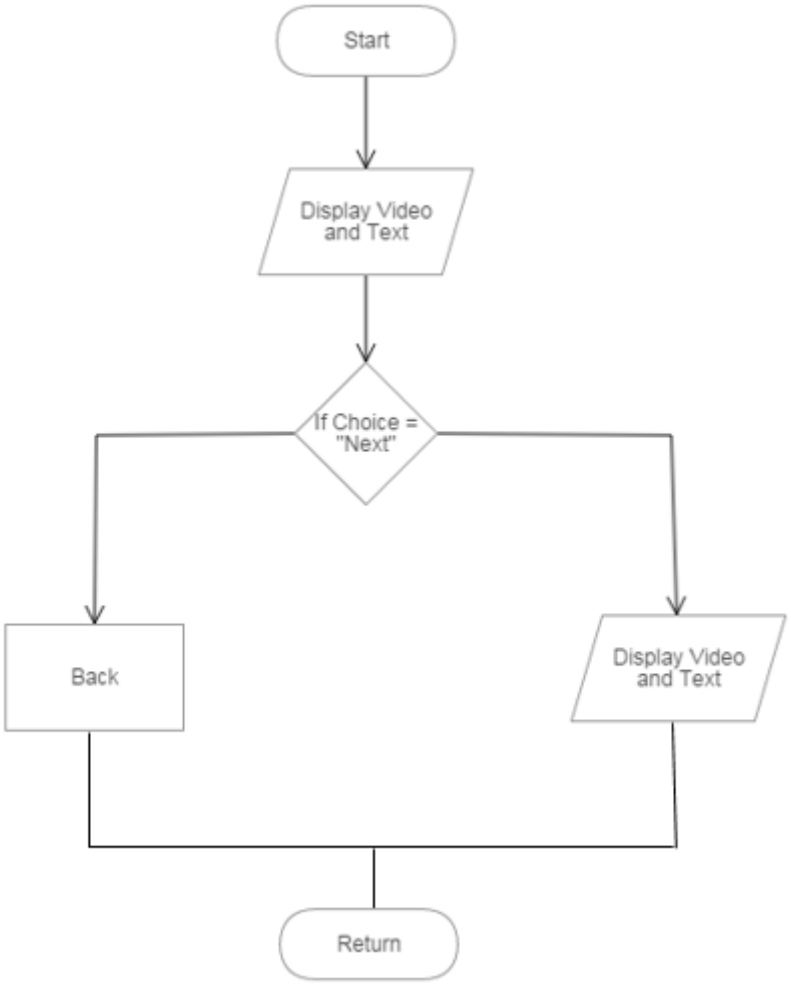


Figure 10. Volcanic Eruption

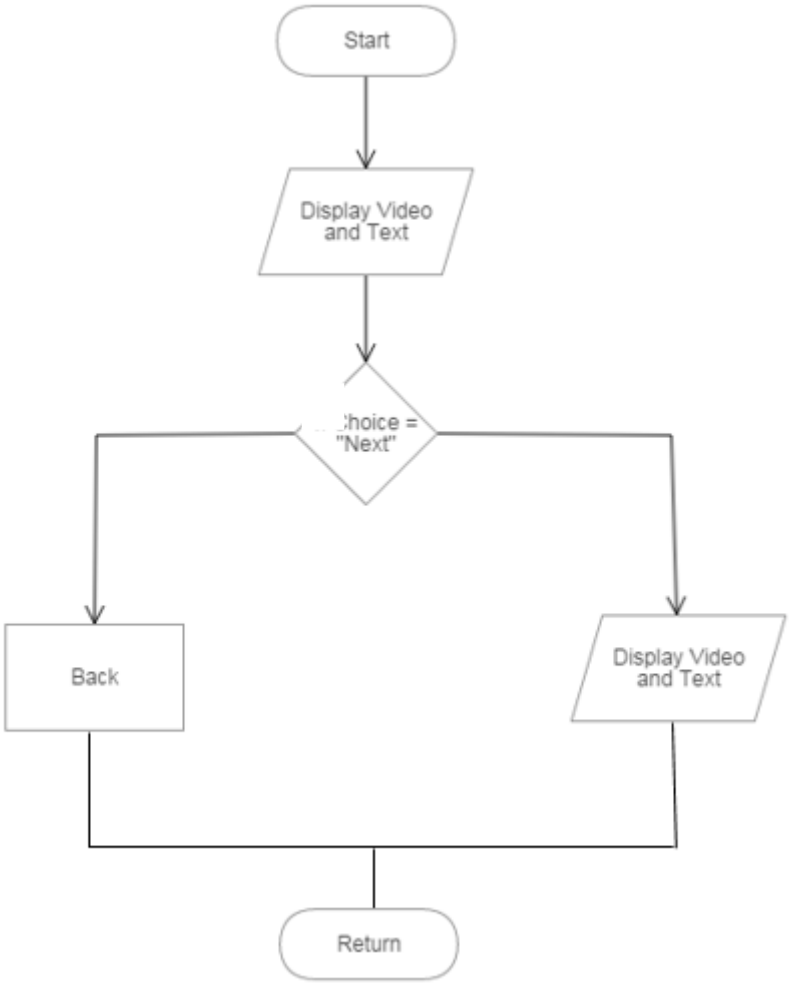


Figure 11. Landslide

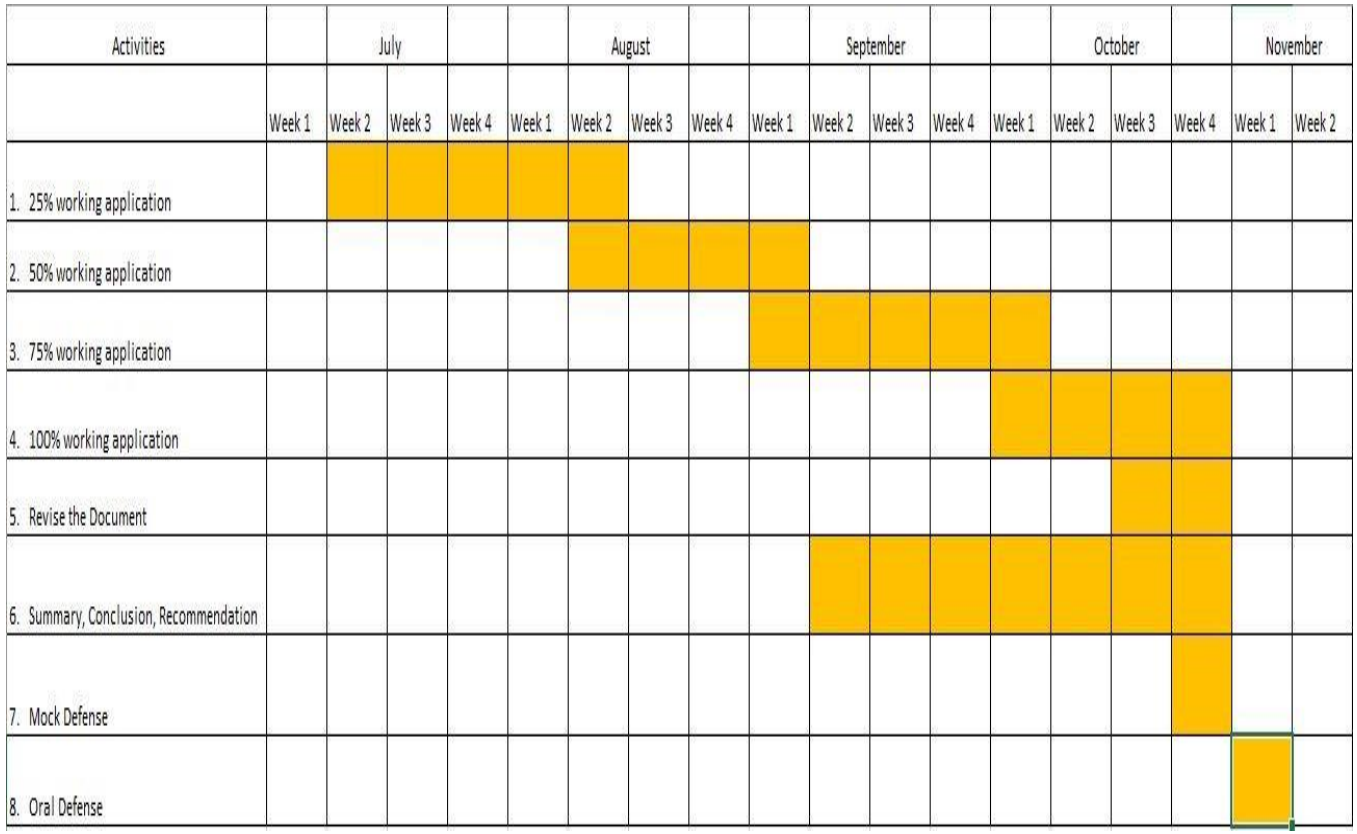


Figure 13. Gantt chart for Capstone 1

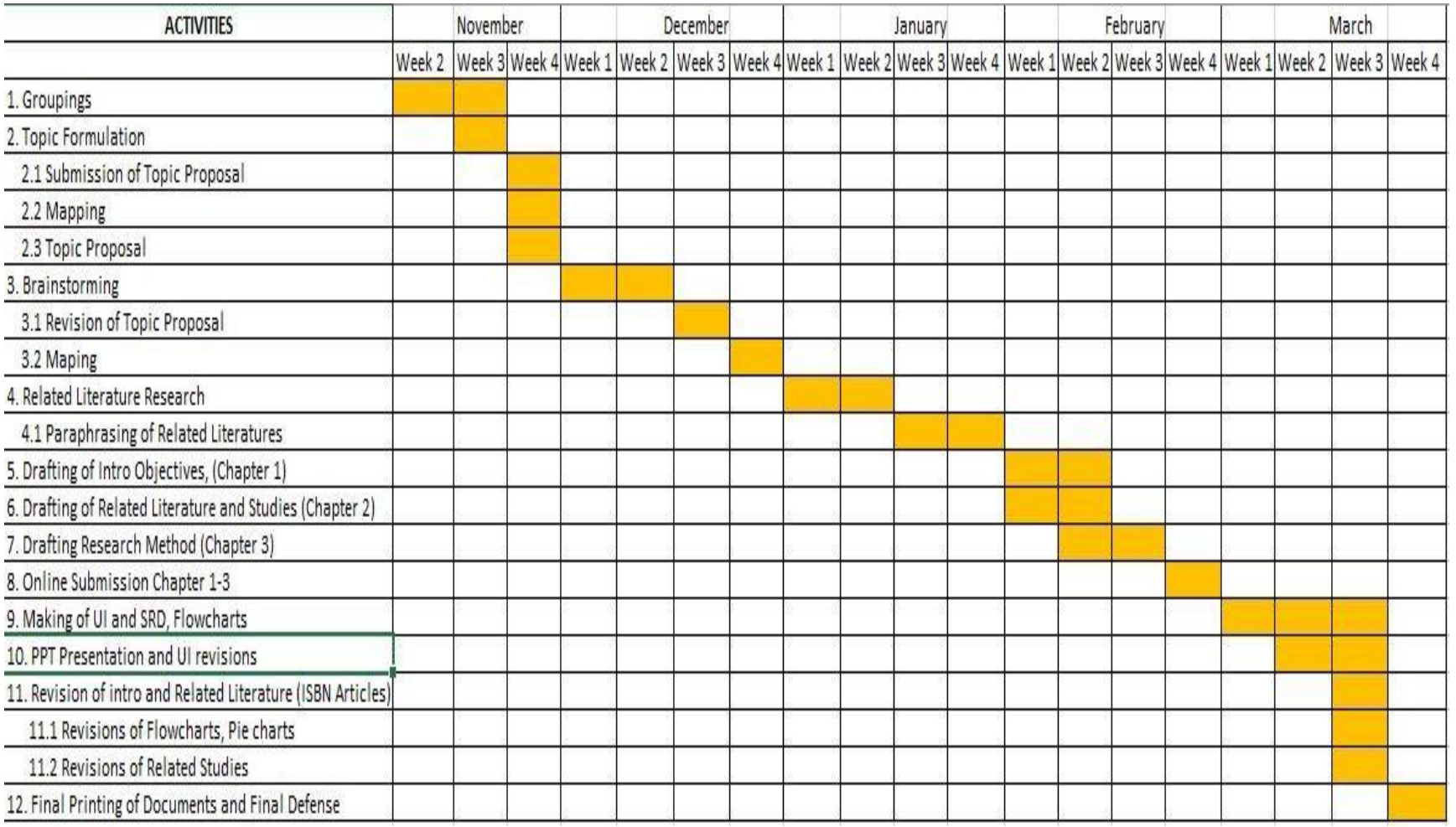


Figure 13. Gantt Chart for Capstone 2

4.0 RESULTS AND DISCUSSION

4.1 SCREENSHOTS

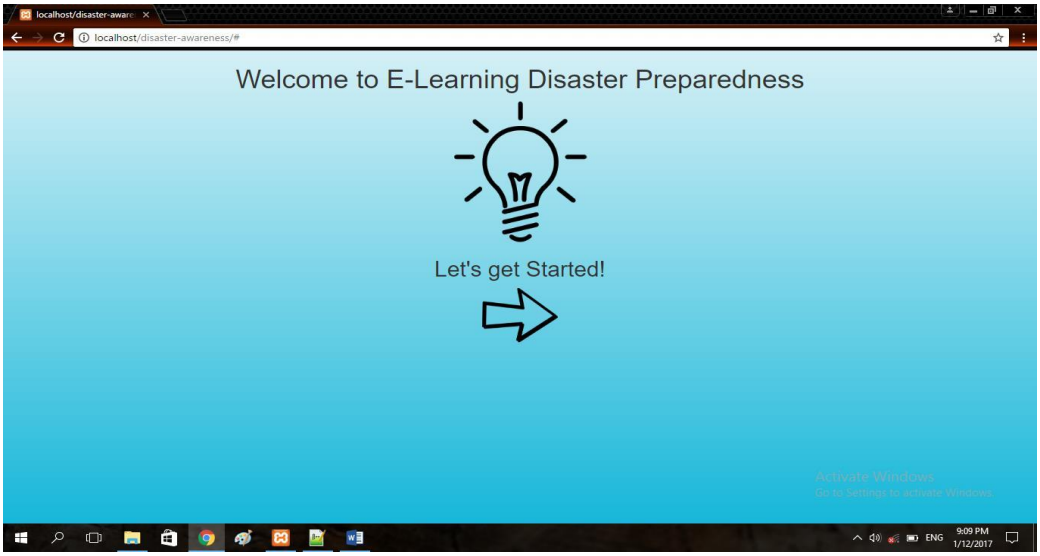


Figure 14. Home Page

The Start Page contains an arrow that when you click it will directly go to the Homepage.

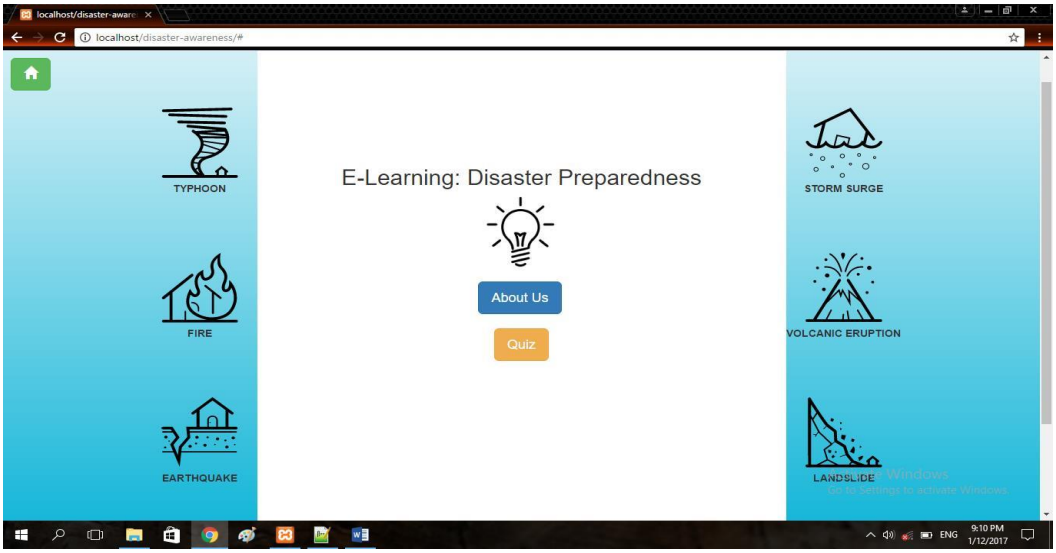


Figure 15. Menu

Once the arrow button is selected it will directly go to the Homepage of the E-learning Website.

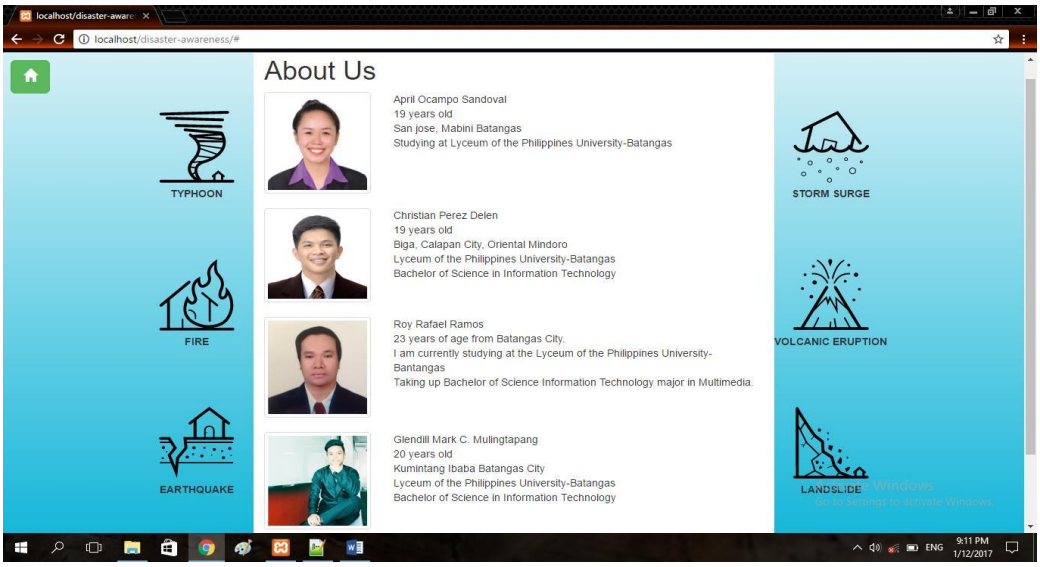


Figure 16. About Us

At the homepage, you will see at the center 2 buttons (About Us and Quiz) Once you click About Us Button you will be redirected to the About Us That displays information's about the developers that help each other in other to finish this project.

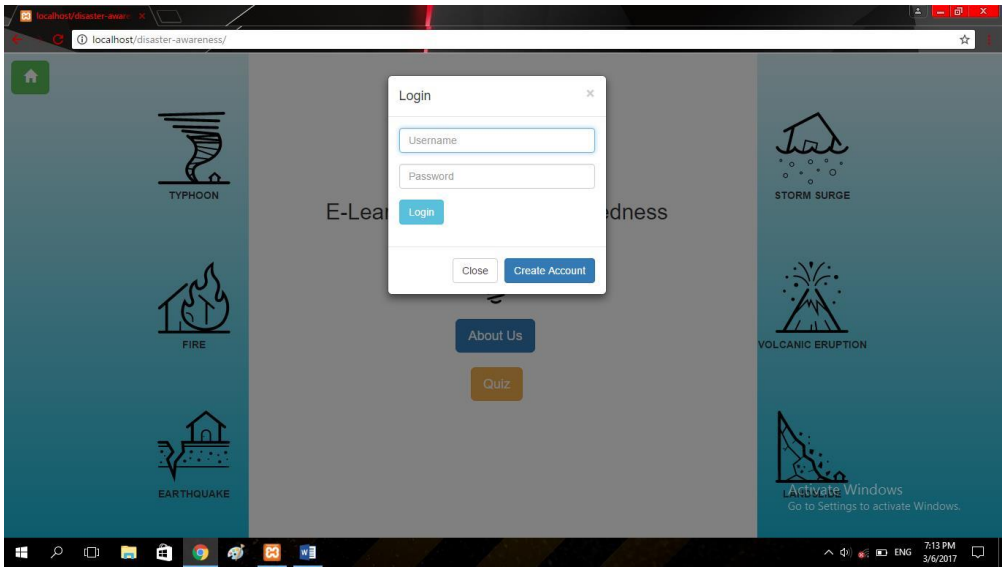


Figure 17. Log-In Screen

Before logging in, you should create an account first.

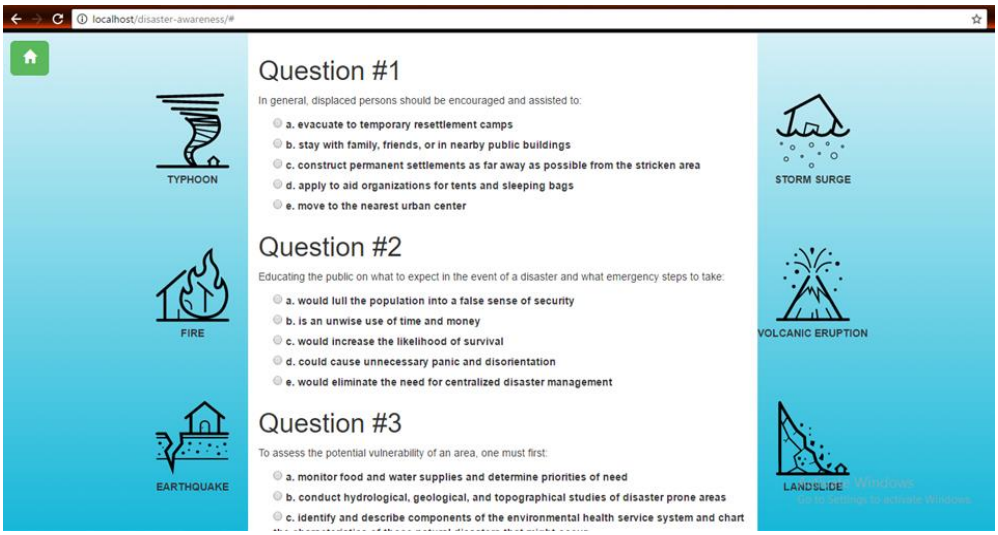


Figure 18. Quiz Questions

This display interactive quizzes/videos that will ask the user 25 questions regarding the topics discussed in the E-learning.

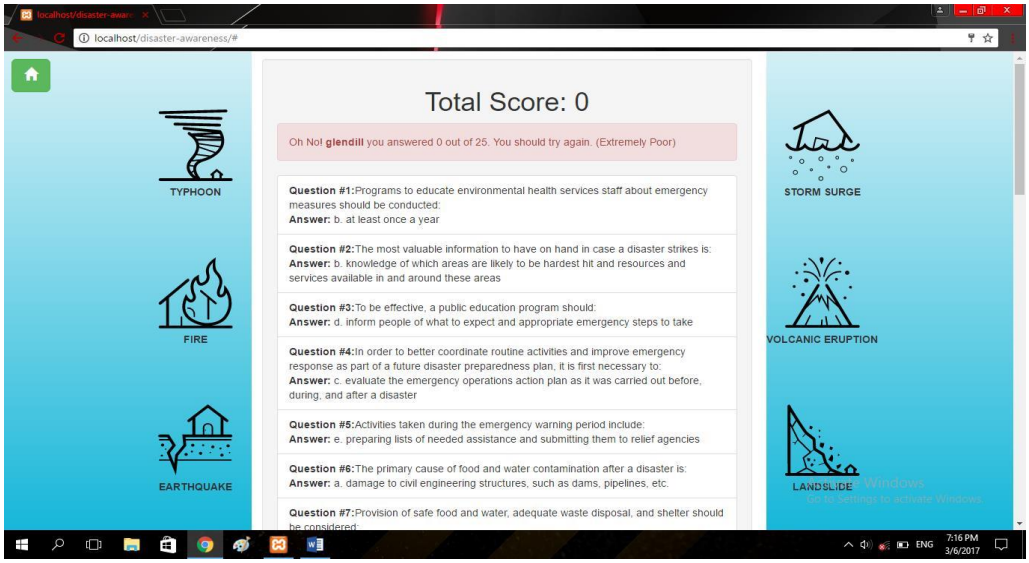


Figure 19. Quiz Answers

After answering all the questions it has a submit button that displays your total score and all the questions with the correct answers.

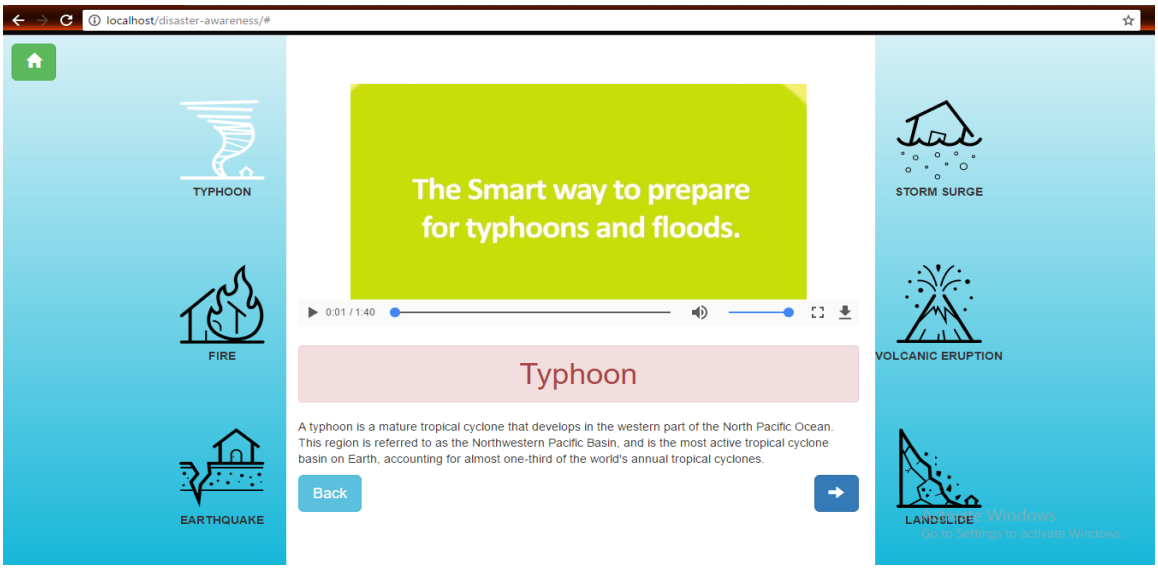


Figure 20. Typhoon Option

This display the information about Typhoon

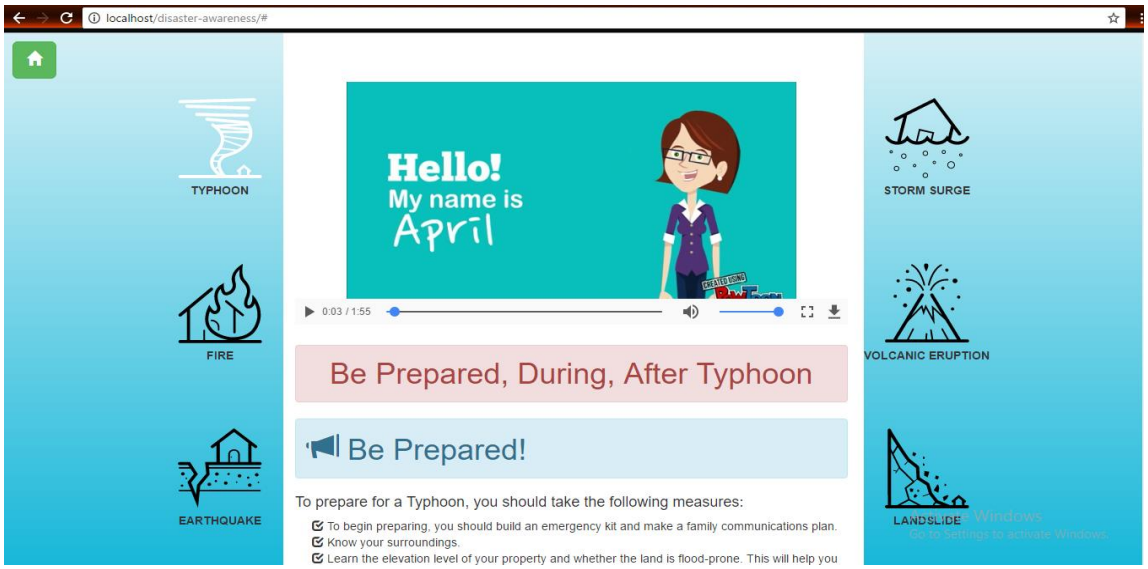


Figure 21. Typhoon (Be Prepared, During & After)

This display the information about Typhoon including what to prepare, what to do before, during and after typhoon

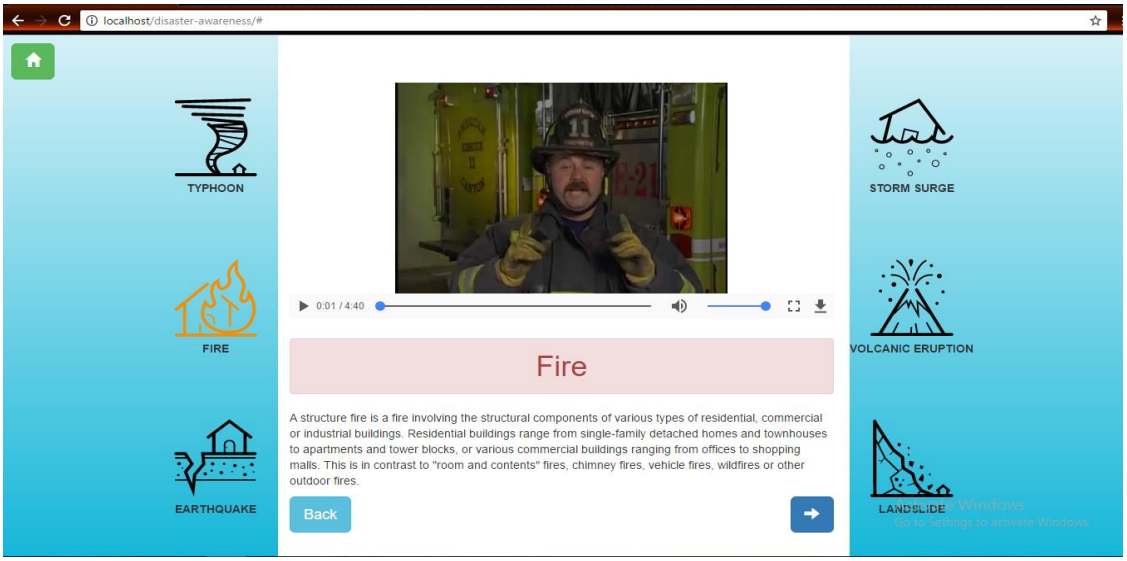


Figure 22. Fire Option

This display the information about Fire

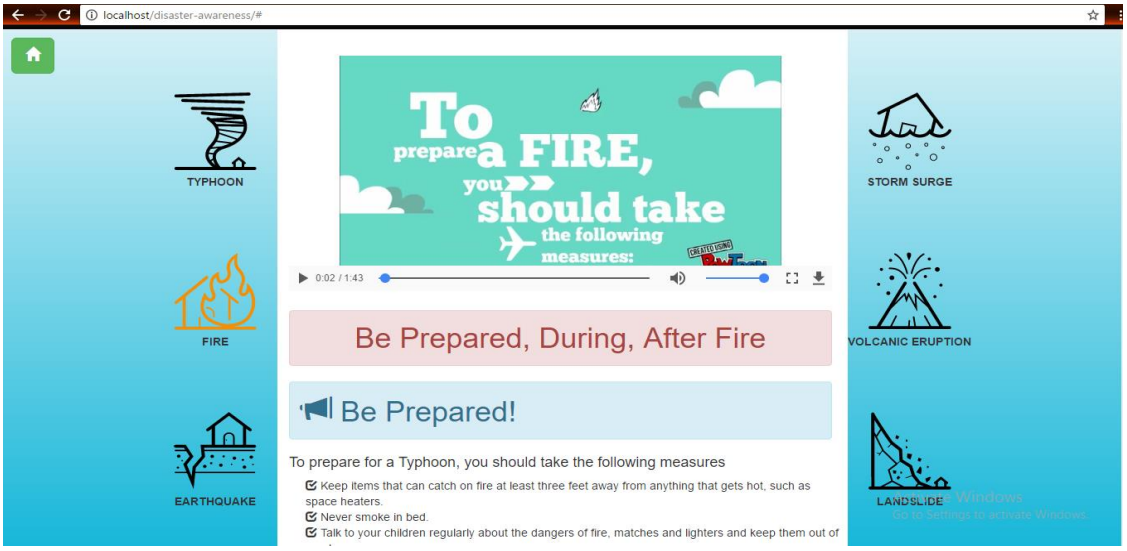


Figure 23. Fire (Be Prepared, During & After)

This display the information about Fire including what to prepare, what to do before, during and after Fire

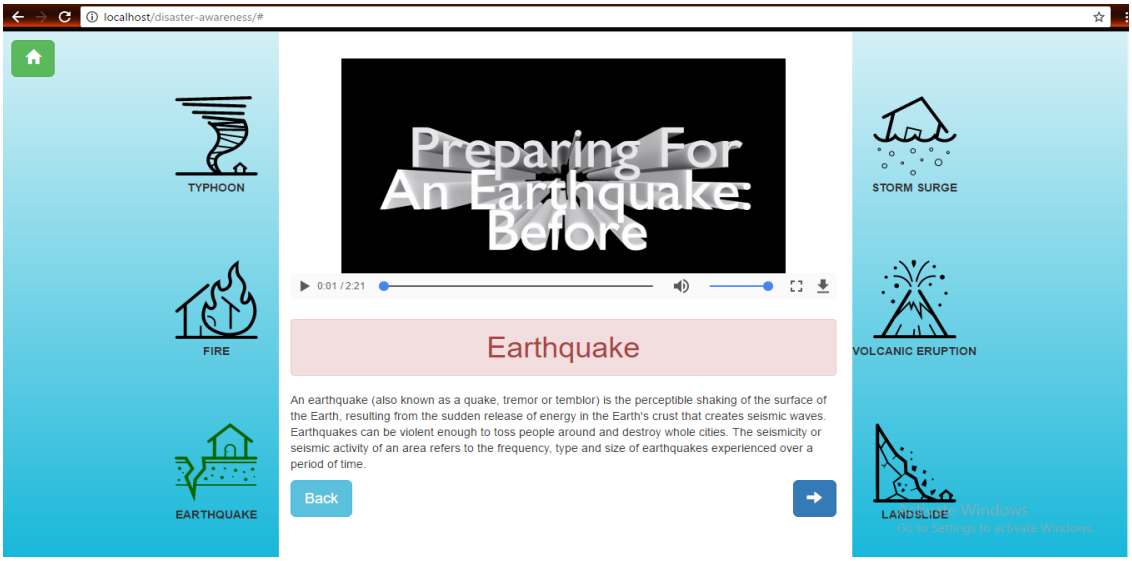


Figure 24. Earthquake Option

This display the information about Earthquake

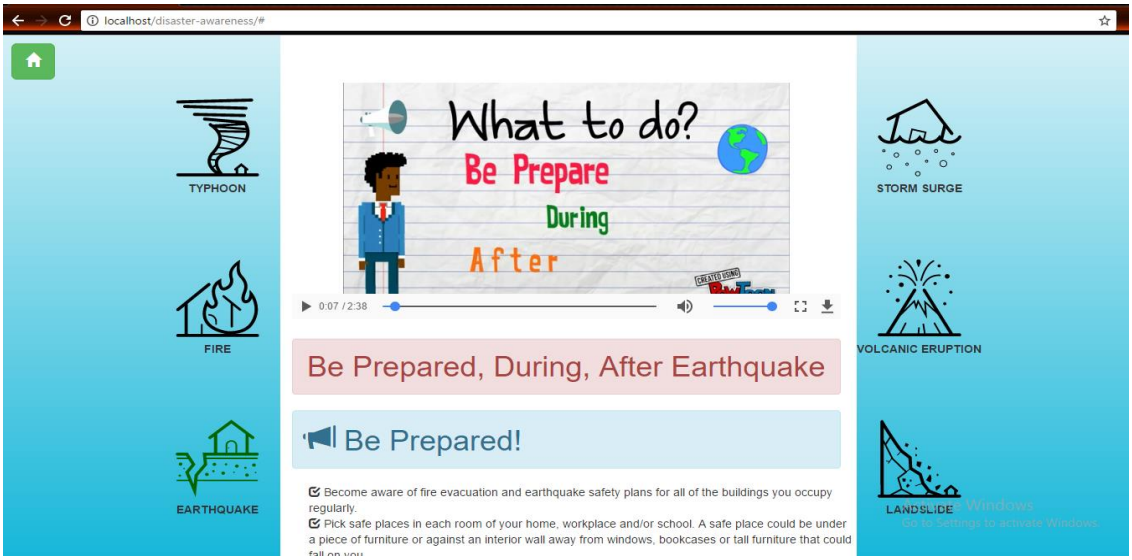


Figure 25. Earthquake (Be Prepared, During & After)

This display the information about Earthquake including what to prepare, what to do before, during and after Earthquake

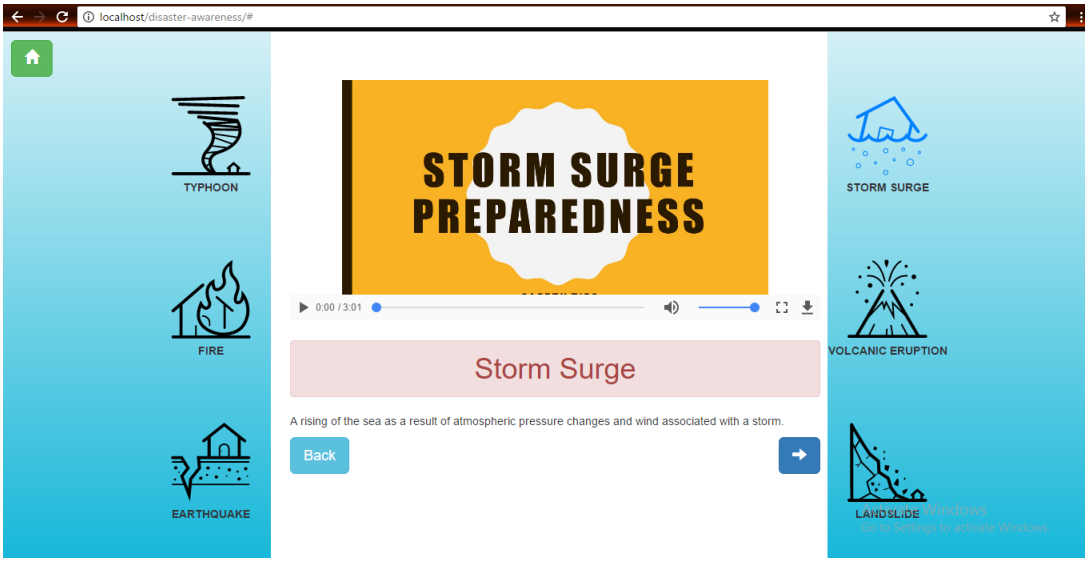


Figure 26. Storm Surge Option

This display the information about Storm Surge

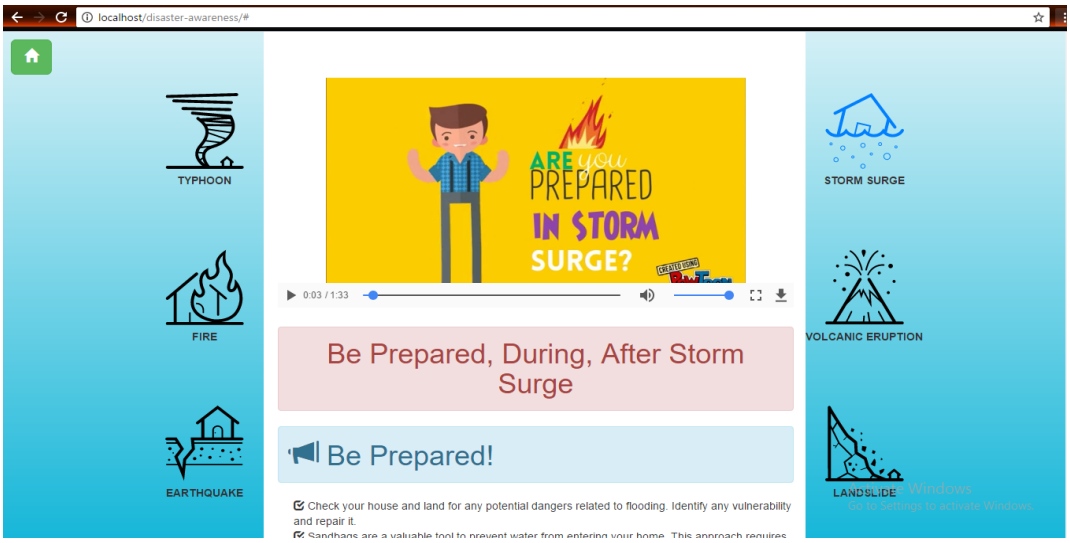


Figure 27. Storm Surge (Be Prepared, During & After)

This display the information about Storm Surge including what to prepare, what to do before, during and after Storm Surge

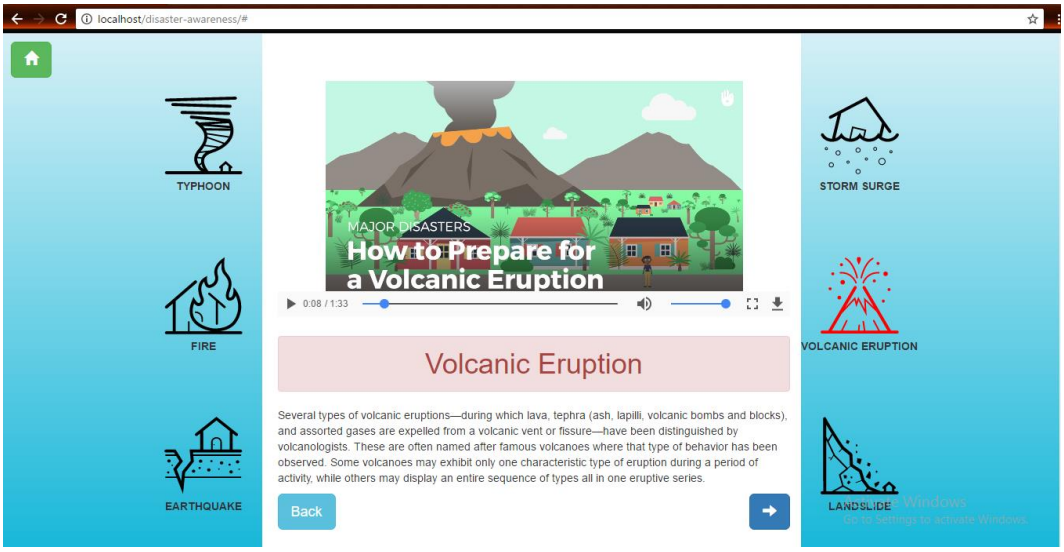


Figure 28. Volcanic Eruption Option

This display the information about Volcanic Eruption

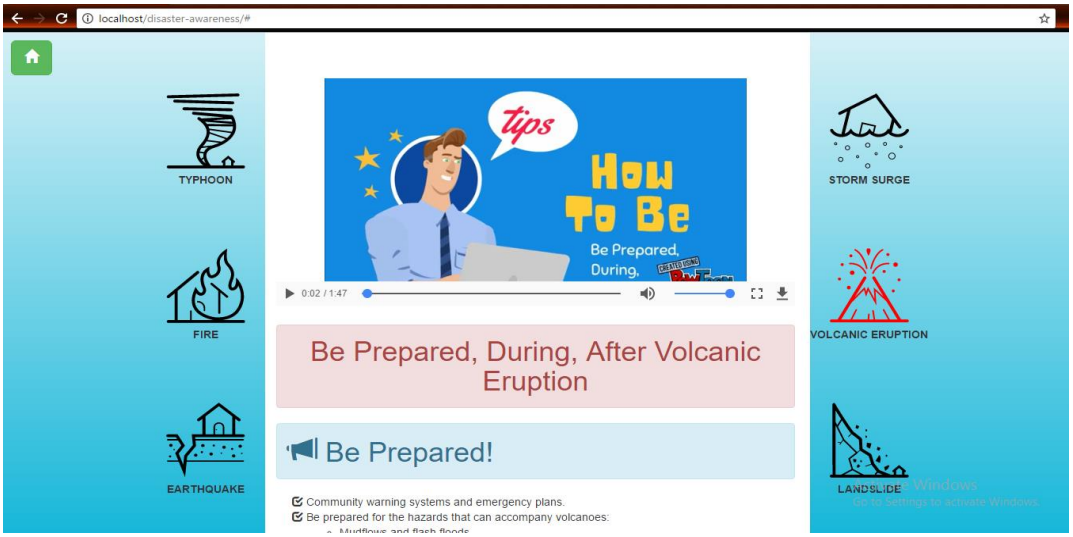


Figure 29. Volcanic Eruption (Be Prepared, During & After)

This display the information about Volcanic Eruption including what to prepare, what to do before, during and after Volcanic Eruption

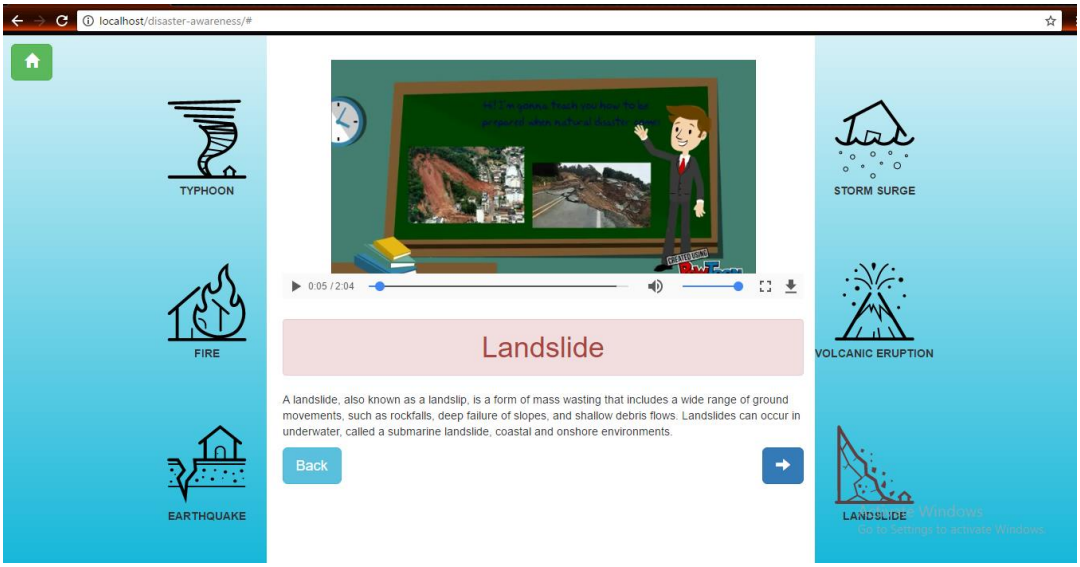


Figure 30. Landslide Option

This display the information about Landslide

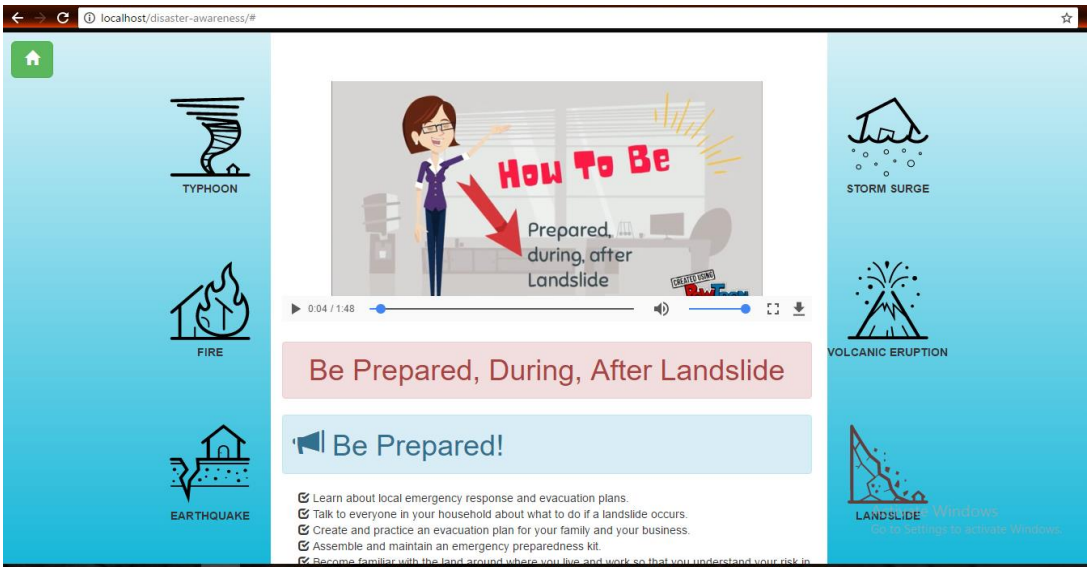


Figure 31. Landslide (Be Prepared, During & After)

This display the information about Landslide including what to prepare, what to do before, during and after Landslide

5.0 SUMMARY, CONCLUSION & RECOMMENDATION

5.1 SUMMARY

This capstone project “E-learning: Disaster Preparedness” aimed at providing an e-learning website that will provide information about the different kinds of disaster and how to deal with it. It will also serve as a helpful and effective tool to disaster personnel, staff or trainees from getting basic information about disaster.

The study dealt with the development and design of an interactive website focusing on disaster preparedness. For the main program, the authors use HTML, for designing web structure and generating purpose programming language. As for the quiz, you must create account first before proceeding to the quiz, the proponents used in the system are PHP, HTML, MySql, and Notepad++(codes).

5.2 CONCLUSION

The researchers have developed an interactive e-learning website entitled “E-learning: Disaster Preparedness” that serves as a helpful and effective tool disaster personnels / staff or trainees in learning basic topics about the different disaster.

The system provides interactive quizzes for easy access, anytime, anywhere by any users.

5.3 RECOMMENDATION

The interactive E-learning is recommended to all disaster personnel, staff, trainees, students, instructor, future researchers and developers who are to develop a similar website such as this or are interested to acquire knowledge and skills in developing an interactive e-learning website. This may serve as a reference material or maybe used to enhance the said website.

References

[1] Adarlo, Romano M. (2015) “Disaster Preparedness-How to Prepare for Disasters(Batangas)” Retrieved from Disaster Preparedness-How to Prepare for Disasters(Batangas)” page 4 Retrieved date [12.11.2015]

[2] Sardjana, Djafja A. (2010) “E-learning Policy in Higher Education Management Strategy” Retrieved from http://www.slideshare.net/djadja/paper-for-international-seminar-integrating-technology-into-educationdjadja-sardjan. Retrieved date [12.15.2015]

[3] Department of Homeland Security,
“Plan and Prepare for Disasters 2016” Retrieved from http://www.dhs.gov/topic/plan-and-prepare-disasters Retrieved date [01.10.2016]

[4] Britannica. Britannica Online for Kids.
Encyclopedia Britannica, Inc., (2016) “Multimedia” Retrieved from http://kids.britannica.com/comptons/article-9330779/Multimedia Retrieved date [01.10.2016]

[5] Arimbuyutan, Reynato C. (2007) “A Study on e-Learning for Philippines” Retrieved from http://www.sersc.org/journals/IJMUE/vol2_no4_2007/5.pdf Retrieved date [07.17.2016]

[6] Y. Kondoa,b,∗ , T. Uozuc , Y. Seinod , T. Akoe , Y. Godaf , Y. Fujimotog and H. Yamaguchih,b (2013) “VOLUNTARY ACTIVITIES AND ONLINE EDUCATION FOR DIGITAL HERITAGE INVENTORY DEVELOPMENT AFTER THE GREAT EAST JAPAN EARTHQUAKE “ Retrieved from http://www.int-arch-photogramm-remote-sens-spatial-inf-sci.net/XL-5-W2/391/2013/isprsarchives-XL-5-W2-391-2013.pdf Retrieved date [01.11.2016]

[7] Martha Kabaka & Juliet Stoltenkamp (2013) “eLearning tools for Public Awareness Programme Education in Disaster Risk Management: Case Study of the City of Cape Town Disaster Risk Management Centre” Retrieved from http://repository.uwc.ac.za/xmlui/bitstream/handle/10566/1171/KabakaDisasterManagement2013.pdf?sequence=1 Retrieved date [02.10.2016]

[8] University of Technology Hamburg- Hamburg (2014) “**Welcome to E-Learning Platform for Integrated Flood Management (IFM)” Retrieved from** http://daad.wb.tu-harburg.de/ **Retrieved date [08.19.2016]**

[9] Zhang, W; Huang, B; Miao, S; Yao, J; Zhang, B; et al (2011) “Develop New Mechanism of Capacity Building of Disaster Preparedness in China” Retrieved from http://search.proquest.com/openview/21ecdf79f2b26fad8b2fe54ecc8d5e45/1.pdf?pq-origsite=gscholar&cbl=105403 Retrieved date [08.19.2016]

[10] Francesco Della Corte, Ives Hubloue, Alba Ripoll Gallardo, Luca Ragazzoni, Pier Luigi Ingrassia, and Michel Debacker (2011) “The European Masters Degree in Disaster Medicine (EMDM): A Decade of Exposure” Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4033243/ Retrieved date [09.13.2016]

[11] Demeter, Katalin “USING MULTIMEDIA TECHNOLOGY TO SCALE UP DISASTER RISK MANAGEMENT TRAINING” Retrieved from http://siteresources.worldbank.org/CMU

DLP/Resources/Andrei_Katalin_web.pdf Retrieve date [02-10-2016]

[12] UNITAR (2015) Retrieved from https://www.unitar.org/fr/unitar-third-world-conference-disaster-risk-reduction Retrieved date [02.11.2016]

[13] United Nations Economic and Social Commission for Asia and the Pacific (2015) “ESCAP launches new online e-learning platform to help build resilience to disasters in Asia-Pacific “Retrieved from https://www.unescap.org/news/escap-launches-new-online-e-learning-platform-help-build-resilience-disasters-asia-pacific Retrieved date [02.11.2016]

APPENDICES

Appendix A.

Survey Questions

Name: _____
Signature: _____

SURVEY QUESTIONS

(Capstone Entitled: E-learning: Disaster Preparedness)

QUESTIONS	YES	NO
Functionality		
1. Does this e-learning easily disseminate informations about Disaster?	100%	0%
Reliability		
2.Are the questions in the quiz reshuffled every time the user begins?	100%	0%
Usability		
3. Is the e-learning easy to understand and friendly-user?	86.67%	13.33%
Efficiency		
4. Is the quiz given in this e-learning support the information given in this module?	83.33%	16.67%
Maintability		
5. While using this e-learning website, have you been experienced any disturbance that caused delays while running the system?	13.33%	86.67%
Portability		
6. Were you able to create an account and log onto it easily?	96.67%	3.33%
7. Did the users easily open the website thru other devices?	90%	10%

Appendix B.

Equivalent of Quiz Scores

The following are the equivalent of the scores after taking the quiz:

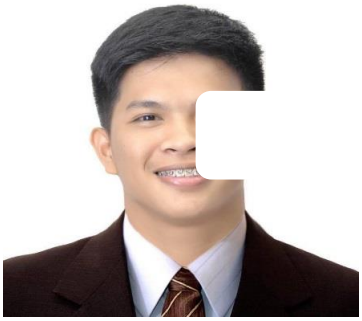
25 - Excellent
24 - Very Good
23 - Very Good
22 - Very Good
21 - Good
20 - Good
19 - Good
18 - Relatively Good
17 - Relatively Good
16 - Relatively Good
15 - Passed
14 - Passed
13 - Passed
12 - Needs Improvement
11 - Needs Improvement
10 - Needs Improvement
9 - Fail
8 - Fail
7 - Fail
6 - Poor
5 - Poor
4 - Poor
3 - Very Poor
2 - Very Poor
1 - Very Poor
0 - Extremely Poor

Appendix C.

Result of Survey Questions

According to the survey we held, the results were as follows:

100% of the respondents agreed that the e-learning disseminates informations about Disaster Preparedness. Also, 100% says that the quizzes given in this e-learning is easily reshuffled. 86.67% says it is easy to understand and a friendly-user and 13.33% disagrees about it. 83.33% agreed that the quizzes given in the e-learning support the information from this module. 16.67% says it does not support. 13.33 of the respondents did not experience any delays while running the system while 86.67% agree that they did not encounter any problem in running the system. 96.67% shows that they easily created an account and logged on successfully and 3.33% had a hard time making an account and logging in. After trying this e-learning website, the respondents were guided to try it on other devices such as mobile phones. 90% agree that it can be easily opened on other devices and 10% did not agree.



CURRICULUM VITAE

Personal Information

Name: **Christian P. Delen**

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Email: christiandelen13@gmail.com
Date of Birth: May 21, 1997
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Citizenship: Filipino
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Age: 18

Educational Background

Primary: Biga Elementary School
Secondary: Oriental Mindoro National High School
Tertiary: Lyceum of the Philippines University-Batangas

Skills

- Proficient with MS Word, Excel, Powerpoint
- Logical and Analytical Skills
- Website Designing
- Editing Photo's in Photoshop

Seminars and Trainings Attended

- "Cyber Security: The Present and Beyond"

  December 7th 2015, Lyceum of the Philippines University Capitol Site, Batangas City

  Integrated Southern Tagalog Association of Information Technology Education

- "Seminar on Thesis and Capstone Writing for ITE Students and Advisers"

February 17th 2016, De La Salle Lipa, J.P. Laurel National Highway, Lipa City, Batangas

Integrated Southern Tagalog Association of Information Technology Education

CURRICULUM VITAE

Personal Information

Name: **Roy Rafael Ramos Garcia**

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Place of Birth: Batangas Regional Hospital
Citizenship: Filipino
Gender: Male
Age: 22

Educational Background
Primary: Libjo Elementary School
Secondary: Batangas National High School
Tertiary: Lyceum of the Philippines University- Batangas

Skills

- Proficient with MS Word, Excel, Power point
- Logical and Analytical Skills
- Website Designing

Seminars and Trainings Attended

- "Cyber Security: The Present and Beyond"

December 7th 2015, Lyceum of the Philippines University Capitol Site, Batangas City

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Name: **Glendill Mark C. Mulingtapang**

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Date of Birth: April 22, 1997
Place of Birth: Batangas Medical Center (BATMC)
Citizenship: Filipino
Gender: Male
Age: 19

Educational Background

Primary: Batangas City East Elementary School
Secondary: University of Batangas (UB)
Tertiary: Lyceum of the Philippines University-Batangas

Skills

- Proficient with MS Word, Excel, Powerpoint
- Logical and Analytical Skills
- Website Designing
- Editing Photo's in Photoshop

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  February 17th 2016, De La Salle Lipa, J.P. Laurel National Highway, Lipa City, Batangas Integrated Southern Tagalog Association of Information Technology Education

CURRICULUM VITAE

Personal Information

Name: **April O. Sandoval**

Address: San Jose, Mabini Batangas

Email: aprilsandoval.ccs@gmail.com
Date of Birth: May 13, 1997
Place of Birth: Bauan Batangas
Citizenship: Filipino
Gender: Female
Age: 19

Educational Background

Primary: Sta. Teresa College
Secondary: Alalum National High School
Tertiary: Lyceum of the Philippines University-Batangas

Skills

- Website Designing
- Proficient with MS Word, Excel, Powerpoint
- Logical and Analytical Skills
- Knowledgeable in Programming using C++, Web Development and HTML
- Knowledgeable in Computer Networking (CISCO)
- Knowledgeable in Installation of Hardware and Software
- Basic skills in Adobe Photoshop

Seminars and Trainings Attended

- "Cyber Security: The Present and Beyond"

  December 7th 2015, Lyceum of the Philippines University Capitol Site, Batangas City
  Integrated Southern Tagalog Association of Information Technology Education

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  February 17th 2016, De La Salle Lipa, J.P. Laurel National Highway, Lipa City, Batangas
  Integrated Southern Tagalog Association of Information Technology Education

Awards and Recognition

- 3rd Placer in Reader's Theater Competition (2015-2016)
- 4th Placer in iSITE Dance Competition (2015-2016)