# Week 1

This week is about the Introduction of our subject i.e (**COIT 20265 Network and Information Security Project )**  Which was the one of the major Project of this semester.

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| **Task** | **Explanation** |
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| **Personal Reflection** | The last semester of my 2 years master’s degree major project of my course study I was so excited to attend my first lecture /Tutor class of Network and Information Security. The tutor has gone through Brief description about subject and taught about the importance of working in group and time management to accomplish my target. So, I learned how project can be completed in provided time frame. There were two cases form that we had to choose one case for our project .by the tutor explanation I got overall idea of my project its specification and requirements. |
| **Project Task Reflection** | When we selected our member or once we were assigned to the group, and we decided to study the concept of case study which we were going to do its detail specification and requirements .It was first week , we just gone through briefly as decide do talk through detailed in following weeks. |
| **Independent Learning and Lessons Learned** | We decide to choose Medical data sharing and I gone through the detail of my case study made my mind clear what we had to do in our project. After reading our case study requirements part I planned little bit concept about the Network design its components and proof of concepts i.e. implementation part. |
| **Problem Analysis** | It was our week, so we had not gone any depth analysis about the case study doing general overview there were not any problem arises. |
| **Evidence of Teamwork** | Our tutor gave us the liberty to choose team members by our own so I, along with 3 members formed group in Facebook (Messenger) where we are communicating till date. As we decide that each member should be active and be accountable the work through the project |
| **Bibliography and References** | CQ University Unit profile, (2020), Viewed from [https://my-courses.cqu.edu.au/pub/profiles?unitCode=COIT20265&termCode=2202](https://www.cio.com/article/2395825/project-management-how-to-design-a-successful-raci-project-plan.html) |

## Evidence

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# Week2

Due to this pandemic it is not possible to meet physically and our all University course conducting through online i.e. (**Zoom platform**). So, we all group members had new experience.

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| **Task** | **Explanation** |
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| **Personal Reflection** | In between the days before this class I had brief idea about our case study, and we did few discussions between those days which made me clearer about the specifications and requirements of the case study. On the previous class tutor mentioned about the portfolio which we had to maintained every week ,I did my first week portfolio and uploaded in GitHub platform which was little bit confused about the using it because I was using it after a long gap. |
| **Project Task Reflection** | We discussed about the case study but our main focused was using the platform GitHub to upload the content /customize in it. |
| **Independent Learning and Lessons Learned** | This week I gone through the lecture and class slides to gain ideas about the design of our network using of different infrastructures and I gone through the guidelines of the portfolio which makes me more clear writing the each week Portfolio. |
| **Problem Analysis** | It was our second week, so I had more knowledge compared to first week and I noted some doubts about the deigning part and how we can start our project , which I gone ask my tutor coming weeks. |
| **Evidence of Teamwork** | Our group leader (Madhav) mailed the tutor about the group formation the members included in our group and we discussed about the RACI matrix which makes easier to distribute the task for our part which makes easy to. Finish our project on time. |
| **Bibliography and References** | Kantor, B 2018, The RACI matrix: Your blueprint for process success, Viewed on 24 July2020, <https://www.cio.com/article/2395825/project-management-how-to-design-a-successful-raci-project-plan.html> |

## Evidence

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# Week3

Due to this pandemic it is not possible to meet physically and our all University course conducting through online i.e. (**Zoom platform**). So, we all group members had new experience. For this week we were planning for Requirements, and Specifications of the project.

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| **Task** | **Explanation** |
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| **Personal Reflection** | As the week 3 start , I had few good concepts about the case study and I personally never use RCAI matrix so I research on it last week and we did few discussion and on this I had clear idea on it too. |
| **Project Task Reflection** | The week 3 mainly focused on the project plan which should be submitted on coming week. So, for project plan we divided the topics individually so that we can do my part separately .In zoom meeting our tutor created the break down room for each group so we were assigned as T4 and we group members discussed our project plan on that break out room. |
| **Independent Learning and Lessons Learned** | For project plan Report, I got my part which was Project Scope and Statement of work. I started research for my part and for project scope I have identity the deliverables and milestones of the project and for SOW the activities which need to be done to acquire the project objectives. I listed the outputs and milestones for the project. |
| **Problem Analysis** | The problem arises during my part was on milestones and deliverables and the assets, later I discussed with my group members I got cleared thoughts about it. |
| **Evidence of Teamwork** | The RACI matrix and Gantt chart were created which made clear role and responsibilities of each member in the group. |
| **Bibliography and References** | Kantor, B 2018, The RACI matrix: Your blueprint for process success, Viewed on 24 July2020, <https://www.cio.com/article/2395825/project-management-how-to-design-a-successful-raci-project-plan.html>  Clarizen T 2019, Milestone vs. Deliverable: What is the Difference? Viewed on 29 July 2020 , <https://www.clarizen.com/milestone-vs-deliverable-whats-the-difference/> |

## Evidence

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# Week4

Due to this pandemic it is not possible to meet physically and our all University course conducting through online i.e. (**Zoom platform**). So, we all group members had new experience. This is the week for Project Plan Submission and Progress Report 1 submission.

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| **Task** | **Explanation** |
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| **Personal Reflection** | As the week 4 start, I completed the part of me i.e. project scope and statement of work which includes project objectives, assets, activities required to achieve the project objectives, mission, deliverables etc. I think I did my part good because it discussed with the tutor and I had done enough research to make it better. |
| **Project Task Reflection** | The week 4 mainly focused on the submission project plan and first progress report and before submitting we added few minor things of each part after doing more depth study. |
| **Independent Learning and Lessons Learned** | For project plan Report, I had gone through different articles and web pages and figuring out the tangible assets as well nontangible assets deliverables mission of projects. For final time I consult my part with my tutor if any topics need to add or missing. |
| **Problem Analysis** | We were fully concentrated fully on our first Progress Report and Project plan during that some problems arises between that time i.e. Business Analysis and proof of concept part but later we discussed and solved it in better way |
| **Evidence of Teamwork** | Each member completed their part and uploaded in the messenger group and for few hours we looked after each other work so that we can point out the missing part , it was good later we combined as Single Report and ready to upload on our Moodle |
| **Bibliography and References** | Jamaledine, R 2017, 6 Steps to Successfully Define the Scope of the Project , Viewed on 4 Aug2020, [https://www.potential.com/articles/project-scope](https://www.potential.com/articles/project-scope/)/ |

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# Week5

Due to this pandemic it is not possible to meet physically and our all University course conducting through online i.e. (**Zoom platform**). So, we all group members had new experience. We submitted Project Plan and Progress Report 1. For this week we analysed the logical design.

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| **Task** | **Explanation** |
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| **Personal Reflection** | As the week 5 started, I completed the part of my work till the last week and I gone through my case study for the designing part i.e. as well as Vulnerability assessment and risk mitigation. |
| **Project Task Reflection** | The network designed part was assigned for one of the group member Madhav but we all group members worked on it and submitted the draft of the diagram to the tutor. |
| **Independent Learning and Lessons Learned** | I gone through the some analysing part as well as vulnerabilities and risk mitigation strategy to make our project more better. I learned the different types of risk that can be handled during the project like as risk avoidance, acceptance. |
| **Problem Analysis** | The main problem of this week was designing part because we try to analyse the old diagram as reference and still, we got some confusion and some problems while defining the risk as Vulnerability |
| **Evidence of Teamwork** | Each member did some homework for the designing part and some changes also made which was given by the tutor and we finalized our design. |
| **Bibliography and References** | Jamaledine, R 2017, 6 Steps to Successfully Define the Scope of the project ,Viewed on 4 Aug2020, <https://www.potential.com/articles/project-scope/>  Roseke, B 2018, Project Risk Management According To PMBOK viewed on 13Aug 2020, <https://www.projectengineer.net/project-risk-management-according-to-the-pmbok/> |

## Evidence

**Taking References from Old Network Design**

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# Week 6

For this Week we had gone through the Network Topology and some Ip addressing and business and technical requirements and submission of Progress Report2

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| **Task** | **Explanation** |
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| **Personal Reflection** | Our Network design was completed as a draft but some things need to added more and I started researching on my part i.e. addressing scheme using CIDR format and found the concept of Inter domain routing with it’s address bits prefix ,suffix etc. |
| **Project Task Reflection** | We started research about the Ip address its business and technical requirements and we discussed about the logical topology which we are going to used |
| **Independent Learning and Lessons Learned** | I started researching on my part i.e. addressing scheme using CIDR format and found the concept of Inter domain routing with its address bits prefix, suffix etc. and topology which we going to used. |
| **Problem Analysis** | For this Week we started designing the new network design along with its topology and Ip addressing and we had faced some problems on it. |
| **Evidence of Teamwork** | We had group discussion regarding the Network topology and its Ip addressing and some business and technical requirements. |
| **Bibliography and References** | Oppenheimer ,P 2010 ,Top-Down Network Design(3rd),Viewed on 27Aug 2020, <https://www.ciscopress.com/store/top-down-network-design-9781587202834> |

## Evidence

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# Week 7

For this Week we had gone through the Disaster Recovery plan and business continuity plan and some infrastructures analysis.

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| **Task** | **Explanation** |
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| **Personal Reflection** | As per week progressed, I was getting more concepts about the Network design part its Ip addressing and its requirements. |
| **Project Task Reflection** | We started research about the BCP (Business Continuity plans) and DRP (Disasters Recovery Plan) which was one of important topic to carry out our work smoothly |
| **Independent Learning and Lessons Learned** | I learned the DRP and BCP and got some knowledge about how we can decrease our risk and disaster and method to cope of that situations. |
| **Problem Analysis** | For this Week we had some problems related to disasters recover that is how we can cope of with that recovery and we discussed with our tutor and made clear concept for this. we started designing the new network design along with its topology and Ip addressing and we try to add some security plans so that our system can get better. |
| **Evidence of Teamwork** | We had group discussion regarding the recovery plans and business continuity plans, and we discussed few things about the proof of concept. |
| **Bibliography and References** | Davis, J 2018 , BCP vs: Key Differences between Every Financial Institutions Need to know, Viewed on 03 Sep 2020, <https://www.safesystems.com/blog/2018/06/bcp-vs-dr-key-differences-every-financial-institution-needs-to-know/> |

# Week 8

For this Week8, we must submit our progress report 3 was well our Network Design diagram with using appropriate tools.

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| **Task** | **Explanation** |
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| **Personal Reflection** | I analysed the Network design with using appropriate tools and did few researches about the Networking, servers, virtual machines, and storage systems. etc. |
| **Project Task Reflection** | We had some problems regarding our topology, so we decided to give few more things on project requirements, and we started discussing about the use of the Network infrastructures. |
| **Independent Learning and Lessons Learned** | I did research more about the using of Ip address viz assigning the appropriate IP address, subnet mask prefix, suffix to the router, sever. I had knowledge about this topic earlier during my Network design course. |
| **Problem Analysis** | We got problems using the appropriate tools and appropriate Ip address and we had clear it out from our tutor. |
| **Evidence of Teamwork** | We created the New logical diagram and we have submitted the Progress report 3 for this week. |
| **Bibliography and References** | Oppenheimer ,P 2010 ,Top-Down Network Design(3rd),Viewed on 27Aug 2020, <https://www.ciscopress.com/store/top-down-network-design-9781587202834> |

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# Week 9

For this Week9, Last week submitted our progress report 3 and we moving towards proof of concept part.

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| **Task** | **Explanation** |
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| **Personal Reflection** | So, I have started working on Proof on Concept and our POC is full focused on the Cloud platform, so I choose Amazon Web Service as created the account for AWS. |
| **Project Task Reflection** | We were focused for the POC part we collected some information about the POC part for Hardening and Testing, Validation. |
| **Independent Learning and Lessons Learned** | I did research more about the using of AWS service and Creating Instances on it and well as the research more about the Kali Linux for testing part. I Searched more about the Hospital Data Sharing sites to gain more about the implementation of MDS |
| **Problem Analysis** | We got problems using the Kali Linux and AWS because all the members are beginners about that platform. |
| **Evidence of Teamwork** | We discussed about the project issues arise during POC part. |
| **Bibliography and References** | Yadav, K 2018, What is AWS and What can you do with it, Viewed on 16 September 2020,  <https://blog.usejournal.com/what-is-aws-and-what-can-you-do-with-it-395b585b03c> |

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# Week 10

For this Week10, we have already started on Proof on Concept part we focus on how we can secure our MDS by any External threats.

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| **Task** | **Explanation** |
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| **Personal Reflection** | So, I started on Proof on Concept and depth study about the Security part how we can make our MDS secure using secure Mechanism using password mechanism. |
| **Project Task Reflection** | We were focused hardening the MDS system using different security strategies. In our MDS project we use special case letter of 8 character and some special symbols and punctuations. We started making of presentation slide. |
| **Independent Learning and Lessons Learned** | I found some interesting facts about the use of firewall to control the unwanted traffic coming and protect the system form unauthorized user. |
| **Problem Analysis** | We got problems implementation of firewall on AWS because it was new for us and we did research and we implemented it. |
| **Evidence of Teamwork** | For this week we did a lot of discussion as the usual about the hardening the system and somehow, we can secure our system safely. We have submitted the Progress Report 4. |
| **Bibliography and References** | Software Testing Help 2020, A complete Guide to Firewall: How to Build A Secure Networking Viewed on 25 September 2020,  [https://www.softwaretestinghelp.com/firewall-security](https://www.softwaretestinghelp.com/firewall-security/)/ |

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# Week 11

For this Week11, we have almost finished our Proof on Concept part but some of the security mechanism and system implementation still remains so our tutor alongside Co-Ordinator decided to shift the Presentation on Week 12 which was supposed on be on Week 11.

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| **Task** | **Explanation** |
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| **Personal Reflection** | I read depth on Kali Linux about Penetration using of different kali tools like SQL injection. I started to prepare about the part for my presentation. |
| **Project Task Reflection** | We discussed about the penetration test and using of different Kali Linux tool slice Brute force attacks and we started for making the presentation as well as prepared for the submission of the final report were focused hardening the MDS system using different security strategies. In our MDS project we use special case letter of 8 character and some special symbols and punctuations. We started making of presentation slide. |
| **Independent Learning and Lessons Learned** | I found interesting things about the Kali Linux how we can use Kali for the data gathering and for security test and found if there any loop in our system. I found some interesting facts about the use of firewall to control the unwanted traffic coming and protect the system form unauthorized user. |
| **Problem Analysis** | This is most difficult week because we have faced lots of problems using the kali in AWS is itself the hard task and Kali as penetration tools is getting out of our head but somehow we manage and get some from our tutor and we manage to perform the test. We got problems implementation of firewall on AWS because it was new for us and we did research and we implemented it. |
| **Evidence of Teamwork** | For this week, we completed the Penetration part and for our Presentation part we practice in Zoom because we did a lot of discussion than usual about the hardening the system and somehow, we can secure our system safely. |
| **Bibliography and References** | AVNER. G, 2018, OWASP Top 10 Vulnerabilities List -You’re Probably Using It wrong Viewed on 1 October 2020, <https://resources.whitesourcesoftware.com/blog-whitesource/owasp-top-10-vulnerabilities> |

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# Week 12

For this Week12, we have finished our Proof on Concept part and we are ready to deliver our Presentation to our Tutor/Coordinator as per our class schedule we are ready to deliver our Presentation and POC demo.

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| **Task** | **Explanation** |
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| **Personal Reflection** | I was so happy since I have learned different things and way of implementation for our MDS project and I can proudly say I was lucky to be part of Such Energetic team and I was ready for the Presentation I had good practice before going to deliver our presentation some emotions bit rusty and nervous, I deliver my part which was Introduction, Objectives, and Technical goals. |
| **Project Task Reflection** | We discussed about the presentation and presented our Presentation, and We presented our demo on Penetration testing and we got positive feedback for our presentation as well as in demo part too by our Coordinator and Tutor |
| **Independent Learning and Lessons Learned** | I was concentrated for my Presentation and I deliver our Presentation and after that I concentrate on finalizing our Final Report. The Expedition till this week was so exciting, challenging and we have lots of difficulties and by the Team effort we have managed to complete our project in very good manner. |
| **Problem Analysis** | There were some difficulties to present our testing part and making the Conclusion was quite frantic, but we presented or demo and slide in good mind frame. |
| **Evidence of Teamwork** | The time was little to work on Presentation was well as on our Demo but due to our Team effort we have finalized both on time in effective and Effective manner. |
| **Bibliography and References** | Presentation Submission on week 12  <https://moodle.cqu.edu.au/mod/assign/view.php?id=1314325> |

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