VIPASSANA MANAGEMENT SYSTEM – VIA

SEP1 process report

Supervisors:

Mona Wendel Andersen

Michael Viuff

19 / 12 / 2017

Group 3

| Student Name	Student No
Angel Petrov	266489
Rytis Kunigiskis	266109
Rodrigo Pereira	269084
Diyar Hussein	266352
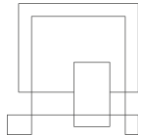
Table of content

Appendices:

- Detailed work log
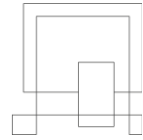
1. Introduction

A group of ICT students – referred to as "Group 3" in first semester studying at VIA University College, Horsens, Denmark have been assigned the task of designing a system for managing information based on the Java programming language. The development of the system should allow the client company - Vipassanā – Insight Awareness (VIA) to optimize their information organisation handling and address any liabilities in regards to data management. The team has been given free imagination, creativity and will as to how to design and assemble the project whilst being provided with crucial information at the stakeholder meeting to get an understanding of potential structuring of the project. This includes team organisation and group work – scheduled meetups, motivation to work, assistance from supervisors so as to have a sense of direction and inspiration whilst achieving an understanding, taking into consideration and building upon given concepts, speculations and ideas. All of these factors make a broad change in how the end result is taken into account and factored.
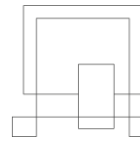
2. Group Description

Group 3 consists of four people:

- Angel Petrov – Bulgaria;
- Rytis Kunigiskis – Lithuania;
- Rodrigo Pereira – Portugal;
- Diyar Hussein – Syria;

Without a doubt, the majority of the group members are from Europe and all members are from different nationalities. The group formation has not changed since the creation of the group at the start of the semester. The following chart gives an insight of potential cultural differences that might be exhibited within our group:
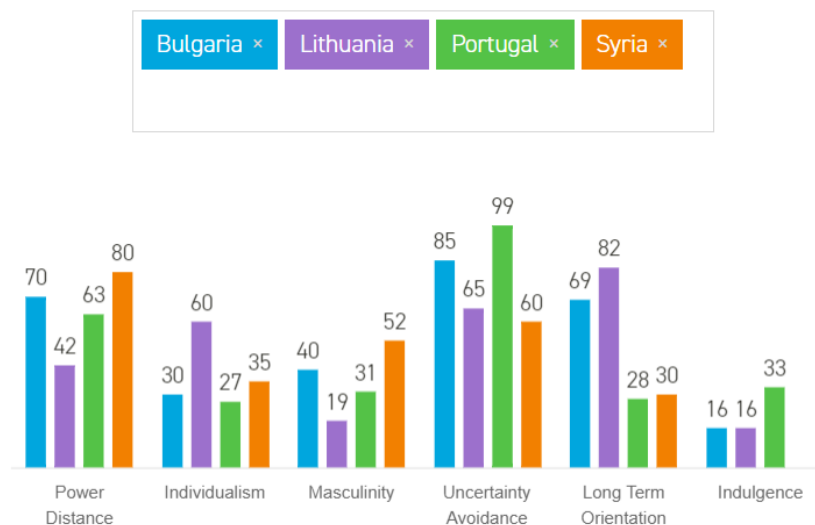

Figure 1 – Country comparison

➢ **Power Distance:**

Given the statistical data in the chart when compared to the psychology and understanding of every individual we are able to determine that group members are satisfied with their roles within the group and the roles of the other group members thus this dimension's data compares perfectly to all individuals. As an example, we do better when we assume the roles that make us feel more comfortable.

➢ **Individualism:**

The individualism dimension is not necessarily a good reflection of how overall group communication, workload and team play are displayed within the group. For the most part, this stands out when group members disobey rules and meetings that they've agreed on – missed out Skype conversations, sleeping in when you're supposed to help out your group or have a deadline
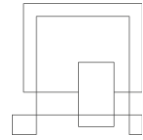
coming up, disagreement on currently made choices or proposal of new ones that are not in agreement with all group members, not attending meetings and straight up leaving when there is no progression. All of this can lead to time wasting, waste of resources and can distribute unnecessary pressure on other group members which can be considered as prioritization of own self-being or "I" rather than a collectivist approach which leads to inefficiency and progress downfall.

- **Masculinity:**

Masculinity for our group in contrast to data that is provided by the graph, does not reflect reality. For example, members from Bulgaria and Syria are highly driven by achievement, followed by Lithuania and Portugal. Things such as getting "small" things done or getting something to function properly are an example.

- ***Un*certainty avoidance:**

In reality when comparing the cultural backgrounds to the individuals the data does not match how group members avoid uncertainty in the group. Some of the members who are part of building this project do not take enough participation and commitment – they're unable to think things through and are uncertain in their knowledge base to build upon the project based on current factors which sways project outcomes.

- **Conclusion:**

Work-wise, member work consistency on the project is comparable to a sinusoid – sometimes consistent and sometimes not consistent.
The temporal element which is a part from the cultural difference is a direct influence to every single participant in the project.
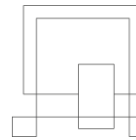
2.1   Group prior experience before commitment to project

All group members have had some programming experience – this includes experience which was accumulated prior to starting the semester project at VIA University College, Horsens, Denmark and before that. The following chart represents what experience we have:
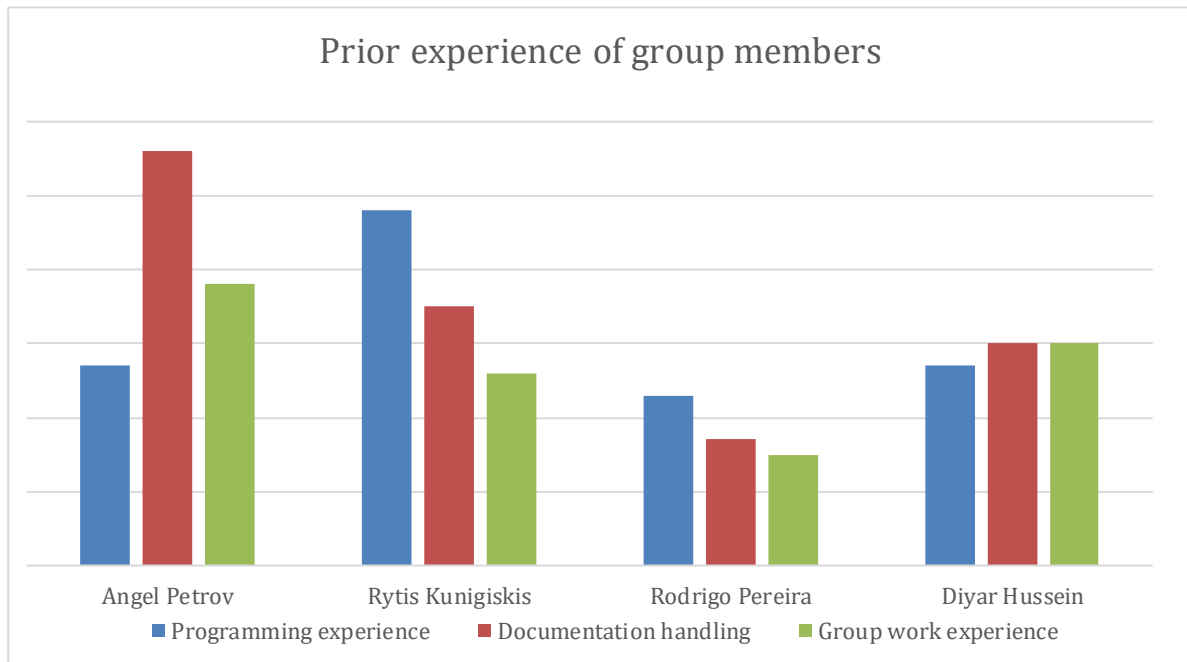
Diagram 1 – Prior experience of group members

As shown on the diagram, group members come in with different experience prior to working in a group. Programming experience of every individual includes all programming languages and is not limited to one. There is no base for comparison of knowledge in this case and as such, the diagram above does not include percentages but rather the use of prior knowledge about programming and the other work fields in our group assignments and projects.
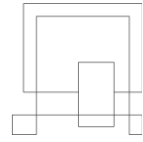
3 Project Initiation

For our group, the project initialization phase took longer than anticipated as we had a hard time defining project objectives, scope, what functionalities we would agree on to implement but the fact that we devoted more time in this phase means that we got a better understanding of how we would structure development of the system and thus accelerated in the development phase of the project.

3.1 Group contract

Following the formation of the group, we formed a group contract which served as a basis for group discipline, mobility and cooperation between group members, group work and individual handling of work and on which we all agreed. The group contract's purpose was to serve as a safeguard for group member work, discipline, mobility and cooperation.
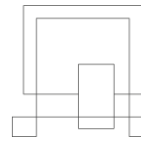
4　Project Description

The writing of the project description and the feedback that we received for part of it gave us an understanding of how the system would function, the general criteria of what it should do, what we should firmly focus on and how we would go on and resolve future issues from the point that we had in the planning phase.

4.1　Project risk assessment – analysis and reflection

Taking into account the risk assessment which our group formulated before starting the construction of the system we are able to reflect upon what we predicted as a risk at that point, what severity it would have, who needs to handle risk mitigation and what the reality of those speculations are in the execution phase of the project period. The following table represents our group's thoughts about project execution risks prior to project execution where the number five is highest and zero lowest:

Risks	Description	Likelihood	Severity	Risk mitigation	Identifiers	Responsible
Running out of time	Time management is a necessity	3	4	Work in the specified work time and plan	Coming up project deadline, stalling	Group 3
Lack of knowledge of how to perform some project parts	To get the best out of the system, knowledge has to be well collected	2	3	Research and ask questions	No initial planning	Group 3
Security of the Information	Securing information, will ensure data leak	4	5	Use basic encryption	Probability of information leak	Group 3
Infringement on third party sources	Relying on proprietary content for "inspiration"	1	3	Don't copy & paste	External code used that is guarded by a proprietary license	Group 3

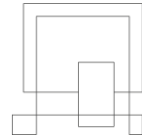*Table 1 – Project description - risk assessment*

Table two shows how our group reflects upon risks within the project execution period (shaded in red colour):

Risks	Description	Likelihood	Severity	Risk mitigation	Identifiers	Responsible
Running out of time	Time management is a necessity	4	5	Work in the specified work time and plan	Coming up project deadline, stalling	Group specific member must be assigned
Lack of knowledge of how to perform some project parts	To get the best out of the system, knowledge has to be well collected	2	3	Research and ask questions	No initial planning	Group specific member must be assigned
Group member uninterested in project work	Whole group commitment is a must	4	3	Attempt to encourage group member to work	No commitment	Group specific member must be assigned
No group discussions in regards to project	Speculating on project work is key when moving forward into its development	3	5	Encourage group communication	No commitment, promises not held up	Group specific member must be assigned

Table 2 – Risk assessment table in project execution phase

➢ Conclusion:

- The likelihood of running out of time is higher because of unanticipated size of workload;
- Responsibility should be assigned to an individual so that they ensure the wellbeing of progress;
- Group members not taking initiative in the project is a negative factor that is with a high severity to the project execution phase;
- Discussions about project need to happen so that progress is being made and work is synced between members;
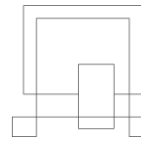
- New risks are introduced that can have an actual impact on group work, rather than on how work can be tackled as per project description requirements.

4.2   Delimitation of project assembly and scope

When reflecting upon what our group predicted in the project description phase of the semester project the first two delimations were covered in the following diagram. Three new delimitations have been added so as to reflect on final progress:

Delimitation description	Added in project planning phase	Added in project execution phase	Conclusion
Searching for most wished lecturers and events	Yes	No	This delimitation has not been included in system functionality
Good looking interface	Yes	No	This delimitation has been followed in regards to system functionality
Finding events within a specific time frame	No	Yes	System will not have the possibility to search events based on time
User preferences handling	No	Yes	System will not take into account what events the user prefers
Automatic email sending to users	No	Yes	System will not automatically send emails to users
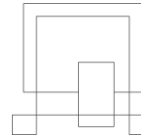
5   Project Execution

5.1   Workload management strategy

Within our group it was crucial for everyone to take on work and assign work to one another depending on the challenges that were ahead so as to not feel lost and have a sense of direction. First, our group would give speculations about how we would achieve the structuring of the work. This is then followed by dividing workload to every individual so as they are able "to specialize" in that given area and put all of their focus on it. The final step is cooperation on what has been done by everyone – feedback as to how it can be improved and how we can make use of their part of the work.

5.2   Group workspace

Within the project execution phase, we first made use of the online service Google Docs for document and code collaboration. This strategy for work on the later immediately showed vulnerabilities in how we would work from here on out – code sharing, code editing, and file organisation would have been extremely hard to manage, collaboration would have been limited and group members would have had a hard time to find errors within this workspace. Following that, we immediately switched to GitLab in collaboration with GitKraken, which significantly eased our workload, gives us more insight as to what fellow group members have modified and addressed a potential time factor risk later on.

5.3   General log

We have written a general log that documents what we have done within the project period. You can find a daily log in the appendices section. The general log is as follows:

➢ PROJECT DESCRIPTION AND GROUP CONTRACT – from 05.10.2017 to 12.10.2017;
➢ REQUIREMENTS AND USE CASE MODEL – from 12.10.2017 to 19.12.2017
➢ USE CASE DIAGRAM – from 23.10.2017 to 18.12.2017;
➢ UML CLASS DIAGRAM – from 23.11.2017 to 17.12.2017;
➢ SYSTEM DEVELOPMENT – from 03.12.2017 to 14.12.2017;
➢ SUPERVISOR MEETING – from 07.12.2017 to 18.12.2017;
➢ PROJECT REPORT – from 08.12.2017 to 18.12.2017;
➢ GUI DESIGN – from 08.12.2017 to 14.12.2017;
➢ SUPERVISOR MEETINGS – from 07.12.2017 to 15.12.2017;
➢ PROCESS REPORT – from 12.12.2017 to 18.12.2017;
➢ SYSTEM FUNCTIONALITY IMPLEMENT – from 09.12.2017 to 16.12.2017;
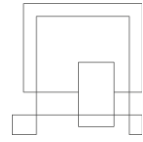
- TESTING – 13.12.2017 to 18.12.2017;
- USER GUIDE – from 15.12.2017 to 18.12.2017;
- JAVA DOCUMENTATION EXPORT – 19.12.2017;
- SEQUENCE DIAGRAM – 19.12.2017
- SYSTEM COMPILE – 19.12.2017.
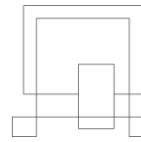
5 Personal Reflections

> Angel Petrov:

My personal reflection upon group work and how we progressed through the semester is that it was tough on all of us because of the way that the majority expressed not having any sort of "high" standards nor achievements that they would like to have – this is how we all made it on ourselves. I have given my absolute best and beyond that to motivate every single group member which includes myself and to bring forward a set thinking of innovation and inspiration to all group members (despite group member weakness and carelessness at certain points) which has had a huge positive impact on group productivity. The group was generated on the bases of randomness to which the professional qualities of every individual group member had to be coped with the other group members so that all group members work on projects. This process of coping with each other's possibilities was happening at all times when doing projects and had a variable (sinusoidal) effect on moving forward to succession and achievement for group projects and, of course, this had meaning on the performance of the group. During the semester project period, I did learn quite a lot of how a system has to be implemented and how everything ties together and got a taste of how everyone has to have a role in constructing the system, however, I was not the one that took the lead role when coding the system but rather was somewhere in the middle due to my knowledge possibilities about Java and less prior programming experience. However, my role was crucial within how everything turned out to be as I am most fond of the devotion and effort that I put in every single detail that I constructed for the better of all and for the better of the project. For me, it is not about just getting the work done but doing the best that you are able to within your limits and commit yourself beyond your absolute maximum in order to enjoy what you have achieved by which you are able to enjoy other aspects of life and not constantly worry about working. Throughout most of the semester, group work was inconsistent and inefficient as initiative was only from my part on starting work, improving the way we work and to an extent crucial decision making. A group functions properly when all group members are thinking together in solving difficult tasks, taking initiative and overcoming / tackling obstacles that would otherwise be almost an impossible task for an individual. This was expressed sometimes in our group which I am very happy about and when I see somebody giving their all, I help with all I can but of course my knowledge has its limits. On the opposite side when someone is not caring at all about how progress is going and how they would like to help out, I immediately try to get them to cooperate but most of the times it's not an efficient strategy even if I execute it properly. My inspiration for better work is when I look at more experienced people and try and seek out inspiration from those people and improve myself even more as an individual. The guidance from the supervisors that I got helped shape my knowledge base, motivation and skills for completing the project and my development in the fields which the
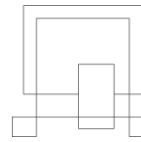
project covers. My goal has always been success at all times even if all odds are against me, I will mobilize whatever resources I have and will attempt my best and the supervisors added to that point for me personally. Group meetings were always a hit or miss where group members would be absent and in some cases, all would be left on me to go through which, again, comes down to personal initiation of every individual in the group. Group atmosphere and group talks, however, were pleasant when they took place and for the most part we have been getting along when talking. Motivation in the group comes from achievement for the most part and member to member motivation within the group which was at most of the times staggering. Demotivation is expressed by no consistent work, no schedule to follow, inefficiency, no straightforward agreement and at times one sided work. For me, I know that we have made mistakes when working on every single project – mistakes such as no clear planning, no consistent workload or not taking into account other risk factors that affect our work and underestimating what we are facing – every single group member but not mistakes related to knowledge. For working on the semester project, we were at best only three people working on it and as reflected before, meetings and conversations were not consistent which lowered progression even more. This can be said especially for within the project execution phase. My personal opinion about our group is that we had hidden potential which we could not make use of at all. We are good at the planning part but never shined in the execution part when working together. For future reference, I hope that I will work with colleagues who <u>are strongly motivated to work in a team</u>, are especially more organized, are serious, are reliable, have more personal relations towards one-another, and this should go beyond just working on projects and assignments and cherish what they have accomplished. Whilst experiencing being in a group, I have concluded that I should also change personally and address all of my weaknesses that I have such by addressing them at present for me to be stronger in the future for the future group that I will be working with – this change should be craved from inside for it to happen. Despite all personal, professional and cultural characterizations, our work team lead the project to successful realization. My expressed personal reflection is as honest as it can be and my vision on how we did in the first semester is more optimistic.

➢ Rytis Kunigiskis:

Personally, I had several problems working in group and with project organized studies.
Probably the hardest part for me was explaining myself and my methods and I believe that occurred because some of knowledge about programming that I have gained before studies was learnt partially in Lithuanian language or from internet, that's why I have hard time explaining my thoughts in English. The same problem also reflects in the documentation, I have hard time to figure out how to describe my methods and actions in proper way.
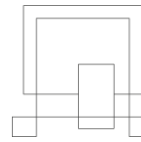
Another problem would be working in group, because It slows me down, when I have task to do for my own, I start doing and focus on it so I can work until I'm finished without having to explain myself. In group work is different, firstly you must split the workload, which is also the third problem that I think we as group faced. Working on separate parts of the task later results to merging it into one final result, where we all have to decide which parts we want to change and how our final result looks like, so again I have to explain my methods there, why I did something that way and not another and so on also look into all the parts that other group members did to understand the end result, which is not my strongest part as I said before, but that's the way it has to be working the group and that usually takes way more time than expected, resulting into time loss and delays on our semester project work.

Splitting workload takes time, sometimes because we cannot gather at the same time and decide who is going to do which part or that we split the work, but later we find out that it would be faster to switch part of works with each other since everyone from group has different strong sides and can do different tasks faster than others. All of this confuses me and cost time which makes me feel that we are not going to be finished with our task in time, resulting to stress, bad sleep. Other problem would be understanding the tasks you need to do. Sometimes I find it very confusing from exercise to understand what you need to do and because of that I spend a lot of time researching and finding the proper way of doing things or if you have already started the work the way it shouldn't be done and find it out later that you needed to do it differently, so that also results to delays and stress.

Last but not least would probably be working as a group, we usually choose to split workload and work when we have time, but meet up or do skype calls to sum up, where usually one or two members of our group can't participate, it is very hard to find the proper day and time for everyone to meet up for sums up since everyone had different tasks and schedules during the day, which also results into confusion and delays, since we can't plan further work or finish sum up of the work before, without everyone participating in it and committing the work we had to do before.

Those would be the problems that I faced and I believe we as group all faced.

➢ Rodrigo Pereira:

Working as a group is not an easy process specially when the group only met few months before the start of the project. For me, the biggest challenge was express my ideas to the other members and add something useful to their thinking. I tried to use my experience of programming to help the group to solve problems that may exist. I think that I should helped more in some group meetings where I only listened and thought by myself. Some personal issues occurred while the project was going on and did not helped in my performance during the project, something that it will change totally in our next semester project.

The group faced some problems during the project especially about the meetings because we though that sometimes we work better alone, and then we could organize everything together.
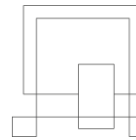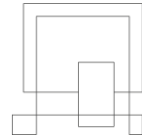
I learnt that it is important to discuss ideas with the other members to achieve a better and a solid way to work in a group project, something that I will have to improve and I have no doubt that it is going to happen. My group was very dedicated and helped me a lot in my part of the project, and with that I can improve faster and develop my group working. The documentation and the class diagrams were the hardest parts to get a final update of the file, we tried to improve more and more to fill all the requests that we should include. We work at our time but in the last days we had to work faster and focused to get the things well done.The program itself we had a lot of help from experience from some members of the group, and helped me to understand how to do it. I have sure that I did not give one hundred percent of me and not close to that to help my group, it was not intentional and I don't blame other events that occurred but I couldn't be the group member that I wanted to be. I appreciate the help that I receive from the others, I don't have nothing to blame them but if could have a next time to work with them, I would not waste that. It was not me on this final mouth of work and I know that I can give much more to help the group in every task that we face. I learn with my mistakes and I'm ready to change my performance, I want to cooperate and give important knowledge and opinion during the work and try to find and solve problems being very attentive in every detail to achievement the better project possible. To conclude, I only can say that it is my fault about my absence in some parts of the project and I am not happy with that because I know that I did not give what I can give and much more. I accept any critic and penalty because I understand the purpose and if I did I know that it is the last time that I receive that. I have all the respect to the other members and I apologize for any inconvenience that I caused. My only change for the future is not forget this semester and be totally different in the next one that I will face. I wasn't motivated caused by external thoughts and not by lack of help from teachers, supervisors and colleagues. I can be myself and work how I know I work and my physical and psychological absence won't happen again.

➢ Diyar Hussein:

Personally, I always had problems when working in groups. When it comes to do a task in a way that satisfies me, I always prefer to do it by myself and I get annoyed when someone else touches something I worked on. But in this case, the project was challenging even for a group to do, so I was somehow forced to gain the team working skills and learn how to split the work and work with others to make it easier and save time to make the system before the deadline.

I also hate paperwork and documentation writing, they make me feel like I'm not doing anything useful but just wasting time typing and explaining how we did the job and how many hours did we spend on it which is not important – in my opinion- for anybody to know. If I was working alone, I would probably have handed the project in without any reports, because I like to focus on doing the job and use the time for making the system better more than writing every single detail about how it was done. And that's why I left writing most parts of the documents to other group members and focused instead on planning and implementing the system.

Finally, I'm satisfied now with what we have, even though I and most group members didn't take the project seriously enough in the beginning and haven't spent the required time on it, but I believe we have done a good job together and learnt a lot from each other. And I'll be proud of working with these guys however the result or the grade will be.

6 Supervision

The help that we received from the supervisors was important for our project in regards to structuring of the system and in relation to documentation which is for the system. In terms of orientation, supervisors played a key role in regards to our actions and possibilities which we reflected upon in our project structuring. These consultations were important for reforming group plans for the development of the system in all time phases as well as the documentation that is associated with the system. The guidance from the supervisors and their specific opinions on our work and progress had an important role in structuring of our project. Generally, these meetings were very important and constructive for us.
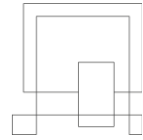
7 Conclusions

Our conclusions and recommendations for group work are that a group has to follow a schedule, work in the designated work periods that have been specified so as to more free time, cooperate on solving complex tasks and rely on each other so as to balance work accordingly, put more devotion into working, push back deadlines so that group members have time to react on time if mistakes or changes that need to be factored in and most important of all make a personal realistic time group plan which is both measurable and achievable.
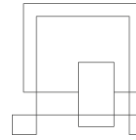
Appendices

➢ Detailed work log

Detailed work log is as follows:

```
[05/10/2017] START WORK ON PROJECT DESCRIPTION AND GROUP CONTRACT;
[06/10/2017] WORK ON PROJECT DESCRIPTION AND GROUP CONTRACT;
[07/10/2017] WORK ON PROJECT DESCRIPTION;
[08/10/2017] WORK ON PROJECT DESCRIPTION;
[09/10/2017] WORK ON PROJECT DESCRIPTION;
[10/10/2017] WORK ON PROJECT DESCRIPTION;
[11/10/2017] WORK ON PROJECT DESCRIPTION;
[12/10/2017] HAND-IN PROJECT DESCRIPTION;
...
[23/10/2017] WORK ON USE CASE DIAGRAMS AND REQUIREMENTS;
[24/10/2017] WORK ON USE CASE DIAGRAMS AND REQUIREMENTS;
[25/10/2017] WORK ON USE CASE DIAGRAMS AND REQUIREMENTS;
[26/10/2017] WORK ON USE CASE DIAGRAMS AND REQUIREMENTS;
[27/10/2017] WORK ON USE CASE DIAGRAMS AND REQUIREMENTS;
[28/10/2017] WORK ON USE CASE DIAGRAMS AND REQUIREMENTS;
[29/10/2017] HAND-IN USE CASE DIAGRAMS AND REQUIREMENTS;
...
[23/11/2017] BEGIN WORK ON UML CLASS DIAGRAM;
[24/11/2017] WORK ON UML CLASS DIAGRAM;
[26/11/2017] WORK ON UML CLASS DIAGRAM;
[30/11/2017] WORK ON UML CLASS DIAGRAM;
[01/12/2017] WORK ON UML CLASS DIAGRAM;
[02/12/2017] WORK ON UML CLASS DIAGRAM;
[03/12/2017] WORK ON UML CLASS DIAGRAM, BEGIN SYSTEM
             IMPLEMENTATION;
[04/12/2017] SYSTEM DEVELOPMENT – CLASS FUNCTIONALITY;
[05/12/2017] SYSTEM DEVELOPMENT – CLASS FUNCTIONALITY, ANALYSIS
             DIAGRAM;
[06/12/2017] SET UP GITLAB AND TRANSFER WORK FROM DRIVE, UPDATE
             CLASS DIAGRAM, SYSTEM DEVELOPMENT;
[07/12/2017] SUPERVISOR MEETING (MIVI), SYSTEM DEVELOPMENT;
[08/12/2017] START WORK ON PROJECT REPORT, INTRODUCTION TO GUI
             SKELETON, UPDATE CLASS DIAGRAM, SYSTEM DEVELOPMENT;
[09/12/2017] IMPLEMENTATION OF EVENT LISTENERS TO GUI, UPDATE CLASS
             DIAGRAM, UPDATE ANALYSIS DIAGRAM, WORK ON PROJECT
             REPORT;
[10/12/2017] SYSTEM DEVELOPMENT;
[11/12/2017] WORK ON PROJECT REPORT, SYSTEM DEVELOPMENT;
[12/12/2017] START WORK ON PROCESS REPORT, SUPERVISOR
             MEETING (MIVI & MWA), SYSTEM DEVELOPMENT;
[13/12/2017] DEBUG FILE R/W, SYSTEM STABILITY TESTING, SYSTEM
             DEVELOPMENT;
[14/12/2017] GUI MINOR CHANGES, PROJECT AND PROCESS REPORT WORK,
             SUPERVISOR MEETING (MWA);
[15/12/2017] WORK ON PROJECT REPORT, CLASS
             DIAGRAM CLEANUP, SUPERVISOR MEETING (MWA), START WORK
             ON USER GUIDE;
```
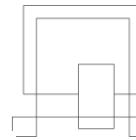
```
[16/12/2017] WORK ON PROCESS AND PROJECT REPORT, SYSTEM CODE
             CLEANUP, WORK ON USER GUIDE CLASS DIAGRAM CLEANUP;
[17/12/2017] WORK ON USER GUIDE, UPDATE ACTIVITY DIAGRAM;
[18/12/2017] USER GUIDE FINISHED, WORK ON PROCESS AND PROJECT,
             ADDRESS CRITICAL FUNCTIONALITY PROBLEM IN SYSTEM;
             REPORT, START WORK ON SEQUENCE DIAGRAM,
             DOCUMENTATION FINALIZATION, REFLECT UPON CRITICAL
             FUNCTIONALITY PROBLEM IN USER GUIDE;
[19/12/2017] HAND-IN OF SEP1 PROJECT - END OF LOG.
```
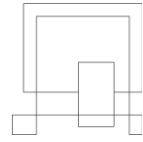
8 Sources of information

➢ Hofstede Insights, 2017. *COMPARE COUNTRIES.* [online],

Available at: https://www.hofstede-insights.com/product/compare-countries/