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| --- | --- |
| H:\Business\Prog Admin\Logos\UnitecHorizontalLogo.jpg | ISCG6411 Project Planning and Control  **Assignment**  Semester 1, 2020 |
| School of Computing, Electrical and Applied Technology | **Deadlines:**  Part A = Friday 27 March 2020, 8:30 a.m.  Part B = Friday 15 May 2020, 8:30 a.m.  Part C = Friday 12 June 2020, 8.30 a.m. |
|  | **Course weighting:** 60% (Part A: 10%, Part B: 25%, Part C: 25%) |

**Assignment Objectives**

After completing this assignment, the student should be able to

1. demonstrate the use of project management tools and techniques
2. create project management documentation
3. apply monitoring and control techniques

**Instructions**

1. This is a team assignment. Maximum team size is four.
2. There are three parts in this assignment: Part 1, Part 2 and Part 3. These parts must be completed in the stated order.
3. Each part of the assignment is based on a case study given in Appendix A (see page 12).
4. Submit all documents that you use to complete each part of the assignment according to the instructions given in the Assignment Hand-in section of this document (see page11).

**Your Team**

All members of each team must be involved in ALL of the planning processes. One of the team members must be identified as the Project Manager while the others must be assigned specific (named) roles (you will need to sort this out yourselves). You are expected to jointly plan and report on this project – all team members should have access to a current set of all the documents (maybe via a Moodle Group page or OneDrive shared folder).

Each team is expected to identity all the tasks that need to be included in the project plan. To share the workload, each team member must be assigned tasks that he or she has to complete. The outcomes of completed tasks should be reviewed by all members of each team. A breakdown of task allocations must be included in the Part-A deliverables. In your planning you need to allow time for the team review of any documents created by individuals.

**Further Instructions**

* After the initial “business meeting” your contact with your “sponsor” and other “stakeholders” will only be via e-mail (i.e. to your lecturer).
* You must send all further questions (following the initial “business meeting”) by e-mail to your lecturer, who will act as your sponsor, or any other stakeholder – you must indicate who the questions are to be addressed to. If you have not received a reply after several days, then do not delay further, but contact your lecturer via telephone to see if there is a problem. (See the course schedule for contact details of your lecturer.)
* All e-mail replies will be sent to the address the e-mail came from. You should use the cc option in your e-mail to ensure all members of your team are fully informed. The lecturer’s reply will then be sent to all the members of your team.
* There may be some restriction on your lecturer’s availability. This means you cannot expect immediate replies, and so you must plan ahead in order to give the lecturer enough time to reply to your e-mail.
* Your plan must be based on the answers to your OWN team’s questions. You must not use answers to another team’s questions. (A record of the answers provided to each team is kept.)
* You will be expected to use your planning skills to get your assignment completed and delivered on time. Excuses for late delivery will not be accepted (use your risk management skills). Take note of the three deadlines. Early submissions are welcome.
* Your project will be running in parallel with the class sessions, which means that Gantt Chart dates (especially the start date and Status Report date) will match assignment deliverables dates. For Part B, your Gantt Chart should show the Charter and Budget approvals happening on Friday, 08 May 2020.
* You must also incorporate into your Part C documents any changes that relate to feedback from Part B. It is most likely that there will be changes caused by the Hardware or Software selection tasks. Your analysis should identify a recommended solution, and the costs related to that should then show in your other documents, especially the Version Two of the Gantt Chart. (i.e. costs will be different from the original Budget.) At a later stage, you will be supplied with another handout that relates to Part C – a set of changes that you will have to apply to your initial plan – your Gantt Chart Version One. For Part C you will need to supply a revised budget and an updated version of your Gantt Chart (Version Two) showing all the required changes, and progress to-date.
* “Task progress” must show in your Version Two Gantt Chart for all activities that have been completed (or partially done) up to Friday, 29 May 2020 (status date).
* The Status Report produced in Part C must match the situation shown in your Version Two Gantt Chart.
* You must correctly assign all costs (including recently added staff costs) to tasks in Part C. This must include your personal (PM) costs as well.
* Finally, before rushing in to ask a lot of random questions, you must first prepare your own team plan of how you will prepare and run this project. For example:

|  |  |  |
| --- | --- | --- |
| **Activity** | **Responsibility** | **Due Date** |
| *Identify team roles and tasks* |  |  |
| *Identify personnel involved* |  |  |
| *Identify business requirements with setting priority* |  |  |
| *Identify potential h/w & s/w costs* |  |  |
| *Get duration estimates* |  |  |
| *Submit Proposal by…* |  |  |
| *etc.* |  |  |
|  |  |  |
| *Up to* ***end of Part C*** |  |  |

**NOTE: Your team plan must be for the whole semester!**

It is not valid to have all or just one student responsible for everything.

**Information Gathering**

Note that this document supplies just a minimal starting set of information. You are expected to gather any additional information needed to develop the required Proposal document (aka Charter), and planning and reporting documents, by asking potential stakeholders relevant questions. This information gathering initially may be done through a meeting with your lecturer and subsequent questions may be asked by e-mail. Please keep minutes of all meetings using a Meeting Minutes Template provided in Appendix C (see page 13). Meeting minutes must be attached as appendices for your final submission *(Check with your lecturer in advance.)*

**Deliverables**

* You are expected to submit your assignment in three parts: Part A, Part B and Part C. Part A will be marked and returned to you before Part B is due and similarly Part B will be marked and returned to you before Part C is due. Changes are expected to be made by you in response to feedback on the Part A and Part B, but anything major will need an accompanying note of explanation in the following submission.
* Assumptions are not acceptable, but a front page of comments (*where data have come from, or why certain tasks have been added*) may help the lecturer to give more credit for the work done. Invalid data (e.g. unlikely hourly cost rates) will still be penalised and so make sure that you get clear answers to your questions.
* All team members will receive the same mark for each assessment, unless a problem of inequitable participation is discussed with your lecturer, in advance.
* NOTE: Your Team Activity Plan should show an equitable workload – this must be confirmed with your lecturer as part of the feedback on your Part A.

**NOTE:** All soft copies of your files must be compatible with the Microsoft Office version 2016 in use at Unitec – use the “save as” menu option if you are using a later version at home. If you are using an older version at home, then check in advance that your file can be read at Unitec.

**Part A**

|  |  |  |
| --- | --- | --- |
| **Submit as an MS Word FILE (a template will be provided)** | | |
| 1. | *(Your sponsor has requested that you supply him with some initial information about the project).*  To do this, the major items to be supplied are as follows:  Your team’s data and **analysis** of the client interviews/e-mails on what they want and how this can relate to MOV *(NOT a dump of our e-mail replies)*. This will make the contents of introduction and description sections of the template. | **MARKS**  5 |
| 2  3. | A draft project “Goals and Objectives”, that must show suitable Acceptance Criteria. Statements of project ownership, scope, and exclusions.  A draft **project** “Work Breakdown Structure” (WBS) or Task List, that must also show dependencies and estimated durations. | 15  10 |
| 4. | Your **Team’s** activity Plan for the whole semester (personal WBS). | 10 |
| 5. | Minutes of your team meetings | 10 |
|  | **Total Marks** | 50 |

**Part A Marking Schedule**

|  |  |  |  |
| --- | --- | --- | --- |
| **Content** | **Marking criteria** | **Mark Possible** | **Your Mark** |
| Data Analysis | Accurate | 2.5 |  |
|  | Complete | 2.5 |  |
| Goals | Clear and Business Related | 5 |  |
| Objectives | Specific and Business Related  e.g. efficiency, productivity, save $ and time | 5 |  |
|  | Deliverables  e.g. IT Solution, Reports, Training, New Procedures etc. | 3 |  |
|  | Acceptance Criteria  Appropriate to the Deliverable – sign-off a Checklist or report, A later measure of $ or time. | 2 |  |
| Tasks | Match objectives must show anything needed  Plus Standard to do tasks for IT Projects such as Detailed Requirements Analysis, H/W purchase, Training, Testing Final Review etc. | 5 |  |
| Dependencies | Clearly identified using arrows or numbers  Understanding of parallel & sequential tasks i.e. not a straight-line project. | 5 |  |
| Group Plan | Suitable Activities  Spread over the whole semester, as per sample or suitable alternatives. | 5 |  |
|  | Shared Responsibility  Even spread of work. | 2 |  |
|  | Suitable Due Dates  Must show the three assignment dates plus some other dates leading into them. | 3 |  |
| Minutes | Minutes of team meetings | 10 |  |
|  | Total | 50 |  |

**Part B**

|  |  |  |  |
| --- | --- | --- | --- |
| **Submit all files in their native file formats.** | | **MARKS** | |
| 1. | **Your Project Proposal** including an initial Budget. It must show your improved Objectives and WBS. | 35 | |
| 2. | **Your Control Plans**. These must be an initial set to cover items that you know about before the project commences, plus any potential events that could occur later. (A minimum of 5 **different** items per control plan.). Also to be included is a Change Management/Control Plan. This needs to include a description of the processes to be followed when changes to the project requirements and plan occurred. *(Don’t just copy our sample!)* | 25 | |
| 3. | **Version One of** an MS-Project Gantt Chart showing **all** tasks, dependencies, and resources (with known costs). This is the original plan and it must show the critical tasks clearly marked by MS-Project *(****without*** *the use of colour).* | 30 | |
|  |  |  |
|  | **Total Marks** | 90 |

**Part B Marking Schedule**

|  |  |  |  |
| --- | --- | --- | --- |
| Content | **Marking Criteria** | **Mark**  **Possible** | Your Mark |
| The Proposal | Complete introduction, stakeholders identification, ownership and description | 6 |  |
| Project goal and MOV aimed at multiple areas of impact for the requirements stated in the assignment and in accordance with the text book and other course materials | 6 |  |
| Objectives, deliverables and measures of success for the requirements stated in the assignment and defined in accordance with the text book and other course materials | 6 |  |
| Project Scope & Exclusions stated in such way that prevent potential confusions | 6 |  |
| Budget derived from and matching with the project plan showing all the resources required | 6 |  |
| Professional presentation | 5 |  |
| **Sub-total (Proposal)** | **35** |  |
| **Control Plans**  *(including Change)* | Risk mgmt plan with reasonably identified risk and realistic evaluations | 4 |  |
| Complete quality mgmt. plan with realistic REQS and measurements | 4 |  |
| Complete issue mgmt plan with reasonable impacts and solutions | 4 |  |
| Complete scope change control plan suggesting a well-devised process | 4 |  |
| Complete communication plan showing major reports with details | 4 |  |
| Complete and correct project library by identifying major documents | 4 |  |
| Style | 1 |  |
| **Sub-total (Control Plans)** | **25** |  |
| **Gantt Chart**  *Version One Gantt chart showing all tasks* | Accurate steps taken in preparing .mpp file in accordance with week 5 handout. Matching the information supplied and the proposed WBS. Phases, tasks and milestones appropriate to the type of project | 8 |  |
| Schedule showing an appropriate sequencing in time plan by considering parallel and sequential tasks. Task durations are realistic and appropriate for the type and size of the project | 4 |  |
| Logical assignment of resources, rates and dependencies. All over-allocations resolved according to the text book and resource levelling methods discussed | 6 |  |
| Complete Gantt chart representing all the stages of the project lifecycle with allocated resources shown on the bars | 6 |  |
| Critical Tasks highlighted in the Gantt Chart | 2 |  |
| Professional presentation | 4 |  |
| **Sub-total (Gantt Chart)** | **30** |  |
| **Minutes** | Minutes of team meetings | **10** |  |
|  | **Total for Part B** | **100** |  |

**Part C**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Submit all files in their native file formats.** | | | **MARKS** | |
|  |  | | |  |
| 1. | **Three** risk analysis reports about the changed events *(from the extra handout at a later time).* | | | 18 |
| 2. | **Version Two Gantt Chart and Revised Budget**   * Your new MS-Project Gantt Chart (complete with costs) showing changes caused by the special handout, plus critical path and the “Progress” up to Friday 29 May 2020. | | | 50 |
|  | * A resource sheet showing all resources and the associated charge out rates. * A cash flow report, showing all expected expenses on a weekly basis. * A revised budget highlighting the modified items and costs | | |  |
|  |  | | |  |
| 4. | A **Two-weekly** Status report to your client up to Friday 29 May 2020 showing progress and **all** changes*.* | | | 32 |
|  | Total Marks | 100 | | |

**Part C Marking Schedule**

|  |  |  |  |
| --- | --- | --- | --- |
| Marking Criteria | | Mark Possible | **Your mark** |
| **Updating project plans by implementing the 3 changes** |  |  |  |
| * Correctly revising the baseline schedule | * Change 1 | 5 |  |
|  | * Change 2 | 5 |  |
|  | * Change 3 | 5 |  |
| Revised task list and Gantt Chart presented correctly and professionally | | 4 |  |
| Progress, baseline and critical tasks shown on Gantt Chart without colour | | 2 |  |
| Correct major tasks and sub-tasks formatting on Gantt Chart | | 2 |  |
| Resource printout correctly showing all resources and charge out rates | | 2 |  |
|  |  | **25** |  |
| * Correctly revising the initial budget | * Change 1 | 5 |  |
|  | * Change 2 | 5 |  |
|  | * Change 3 | 5 |  |
| Revised budget presented correctly and professionally | | 5 |  |
| A cash flow report showing all expenses on a weekly basis | | 5 |  |
|  |  | **25** |  |
| **Risk analysis reports for the 3 changes** | * Accurate | 8 |  |
| * Complete | 8 |  |
| * Style | 4 |  |
|  |  | **20** |  |
| **Status report showing progress and all changes** | * Accurate | 8 |  |
| * Complete | 8 |  |
|  | * Style | 4 |  |
|  |  | **20** |  |
| **Minutes of team meetings** | | **10** |  |
| Total for part C | | **100** |  |

**Assistance to Other Students**

Students themselves can be an excellent resource to assist the learning of fellow students, but there are issues that arise in assessments that relate to the type and amount of assistance given by students to other students. It is important to recognise what types of assistance are beneficial to another’s learning and also what types of assistance are unacceptable in an assessment.

**Beneficial Assistance**

* Study Groups, i.e. your assignment team
* Discussion, especially in class
* Sharing reading material, e.g. via Moodle or shared files on OneDrive.

**Unacceptable Assistance**

* Working together with another team on one copy of the assessment and submitting it as your team’s own work.
* Giving another team your work.
* Copying another team’s or individual’s work. This includes work done by someone not on the course.
* Changing or correcting another student’s work.
* Copying from books, the Internet etc. and submitting it as own work. Anything taken directly from another source must be acknowledged correctly – show the source alongside the quotation.

**Submission**

Also read the hand-in instructions given below. There should be just one submission per team, but make sure you each have soft copies for backup purposes and contingency. The assignment you submit for marking must be a product of your own work (as a team) except for the use of resources supplied with the course, discussions conducted by the lecturer during class time, and other assistance shown as **Beneficial Assistance** in the section *Assistance to Other Students* on page 5, above. Your initial planning must include a plan for sharing the workload for the complete assignment. The lecturer for this course may ask any individual team member for further oral explanations, and any non-participating team members may be given different marks.

Note that a “Peer Marking” form is available on the course site on Moodle. This form should be used when a team member does not contribute as required. You must give advance notice to your team members if you intend to use that form. Also be aware of attendance requirement, (as given below).

**Class Attendance**

Attendance will be monitored. In particular, non-attendance, late arrival and early departure for any class session allocated to assignment team activity (not always on the schedule), will result in a review of what portion of the team mark you would be entitled to.

**Assignment Hand-in**

Only soft-copies of all documents in their native format are required. The soft-copies must be uploaded by the due date/time using the appropriate link provided on the course site on Moodle.

Assignments which are submitted after the due date and time without having received an extension through Affected Performance Consideration (APC) will be penalised according to the following:

* 10% of final marks deducted if submitted within 24 hours of the deadline.
* 20% of final marks deducted if submitted after 24 hours and up to 48 hours of the deadline.
* 30% of final marks deducted if submitted after 48 hours and up to 72 hours of the deadline.
* No grade will be awarded if submitted later than 72 hours after the deadline.

If a team-member does not submit his or her contribution to meet the team’s schedule, then the assignment should still be submitted on time, and the Peer Marking form used.

**Have a query? Want to improve your work?**

You could:

* Talk it over with your lecturer
* Visit Student Learning and Achievement for learning advice and support.
* Visit the Pacific Centre (Building 180).
* Visit Maia (Building 180)
* Contact the USU Advocate for independent advice
* For contact details and more information, go to [www.usu.co.nz](http://www.usu.co.nz)
* Use the link given below on how to write an assignment: <https://guides.unitec.ac.nz/friendly.php?s=assignmenttoolbox>

**Appendix A: Case Study**

Aotearoa Car Rentals (ACR) is a small car renting company operating in Auckland since the last three years. It has its head-office in Ponsonby and operates in 3 other locations in Auckland – North Shore, Manukau and West Harbour.

Over the last 3 years of its existence, the company has achieved very good growth, and demand for its services is expected to continue to rise. As the company has so far not invested in any computer based systems to manage its operations, staff has started coming under extreme pressure to continue serving increasing number of customers and processing all transactions. Management has recently started noticing a few problems; for example, incorrect information about vehicle availability and incorrect invoicing. There have also been a few cases where vehicle shown as available in the records was not physically available when the customer came to pick it up. Staff then had to provide the customer with a higher class vehicle, resulting in some revenue loss to the company.

The company has therefore decided to develop a car rental management system that will cater for the day-to-day functions of managing vehicle bookings, vehicle pickups and Returns, cancellations of bookings, changes to bookings, billings and payments. In addition, the company has decided to develop and implement a website that customers would be able to access through a web portal to create and manage their bookings. The web portal will be interfaced with the car rental management system.

The expectation is that this system will automate most of the company’s operations, resulting in a reduction in operating costs and elimination of errors. Customers will be able to create and manage their bookings and have a ready access to their reservation status through the web portal. Customer service will be improved and this in turn can lead to an increase in the number of bookings, increase in revenue and market share.

ACR has hired the IT services company, Best IT, to implement the proposed system. You work for Best IT, and have been asked to develop the car rental management system, the company’s website and provide a web portal for the customers. You need to plan the project that can be used to develop and implement the system. Your planning will need to include all required project activities and deliverables. Most staff already have the usual Internet and computer skills, but training on the new system will be required. Some procedural changes that are expected must be documented and implemented.

Initially you will have to quickly prepare the Project Proposal for this project. The Operations Manager at ACR will be considered the “owner” of the new system.

**Costs**

Not many costs are known at present. Note that all costs need to be approved in principle by your sponsor before you can include them in your budget.

As future IT professionals you should be able to identify the full hardware and software requirements for such a project and should be able to obtain realistic referenced comparative costs (3 sets) for all new hardware and software.

Although there should be an analysis phase within your project to identify the finer details, you will need to do some initial analysis to define the scope for the overall project. In particular, you will need to identify the roles of any personnel required. The costs of these personnel must be included in your Budget and the Part-B Gantt Chart.

**Appendix B: Meeting Minutes Template**

|  |  |
| --- | --- |
| **Meeting Title** | |
| Held: | <Time and date> |
| Location: | <Location> |
| Present | <List of people present> |
| Apologies | <List of people who sent apologies> |
| Absent | <List of people absent> |

|  |  |  |
| --- | --- | --- |
| 1.<Agenda Topic Name> | | |
| **Notes:** <notes and decisions in this agenda topic> | | |
| **Action Item** | **Responsible** | **Due** |
| **#1 <Action Name>** (date 1) Action progress history  (date 2) most recent action progress | <name> | <date> |
| **#2 <Action Name>** (date 1) Action progress history  (date 2) most recent action progress | <name> | <date> |
| <other actions> |  |  |
|  |  |  |
|  |  |  |

|  |  |  |
| --- | --- | --- |
| 2.<Agenda Topic Name> | | |
| **Notes:** <notes and decisions in this agenda topic> | | |
| **Action Item** | **Responsible** | **Due** |
| **#3 <Action Name>** (date 1) Action progress history  (date 2) most recent action progress | <name> | <date> |
| **#4 <Action Name> - CLOSED** (date 1) Action progress history  (date 2) most recent action progress | <name> | <date> |
| <other actions> |  |  |
|  |  |  |
|  |  |  |

**Appendix C: Project Charter Template**

**Project Proposal for…………………………………………………………………………**

**Date: dd/mm/yyyy**

**Company Name:**

**Introduction:**

**Project Stakeholders:**

<<Provide the stakeholders in this table>>

|  |  |  |
| --- | --- | --- |
| **Role** | **Name** | **Contact** |
| **Manager (PM)** |  |  |
| **Sponsor** |  |  |
| **Client (Owner)** |  |  |
| **Other** |  |  |

**Ownership:**

**Project Description**

|  |  |
| --- | --- |
| Background |  |
| The Challenge |  |
| Desired Impact |  |
| Links to other Projects |  |

**Measurable Organisational Value (MOV)**

|  |  |
| --- | --- |
| *(The Aim in a Business sense)* |  |

**Project Objectives & Deliverables** *(plus Acceptance Criteria)*

<<Provide the list of objectives, deliverables and Measures of success (Acceptance Criteria) here>>

|  |  |  |
| --- | --- | --- |
| Objective *(in business wording)* | Deliverables | Measure |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Project Scope & Exclusions**

<<Provide a summary of the project’s scope and exclusions if any here>>

**Project Work Breakdown Structure**

<<Provide a draft WBS here>>

|  |  |  |  |
| --- | --- | --- | --- |
| # | Task | Duration | Dependencies |
|  |  |  |  |
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|  |  |  |  |

**Team’s Activity Plan**

<<Provide your team’s activity plan here>>

|  |  |  |  |
| --- | --- | --- | --- |
| # | Task | Responsibility | Planned Completion Date |
| PART A: | | | |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| PART B: | | | |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| PART C: | | | |
|  |  |  |  |
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|  |  |  |  |