

Pearson BTEC Level 3 Nationals Diploma, Extended Diploma

Computing

Unit 3: Planning and Management of Computing Projects

Part A

Window for supervised period:
Tuesday 8 May 2018 – Monday 14 May 2018
Supervised hours: 3 hours

Paper Reference
31770H

You must have:
Project_Initiation_Document.rtf

Instructions

- **Part A** should be completed before attempting **Part B**.
- **Part A** and **Part B** tasks will be submitted together for each learner on completion of **Part B**.
- **Part A** contains material for the completion of the set task under supervised conditions.
- **Part A** should be undertaken in 3 hours during the assessment period of one week timetabled by Pearson.
- **Part A** is specific to each series and this material must only be issued to learners who have been entered to undertake the task on a date set by Pearson in the relevant series.
- **Part A** must be kept securely until the start of the 3-hour supervised assessment period.
- **Part B** materials for the set task will be issued prior to the start of the supervised assessment period according to the guidance in the specification.
- This booklet should not be returned to Pearson.
- Answer **all** activities.

Information

- The total mark for this paper is 36.

Turn over ►

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Instructions to Teachers/Tutors and/or Invigilators

This paper must be read in conjunction with the unit information in the specification, the *BTEC Nationals Instructions for Conducting External Assessments (ICEA)* document and the unit 3 administrative support guide 2018. See Pearson website for details.

Refer carefully to the instructions in this task booklet and the *Instructions for Conducting External Assessments (ICEA)* document to ensure that the assessment is supervised correctly.

The set task should be carried out under supervised conditions.

Electronic templates for use in activity 1 will be provided for centres to download for learner use.

Work should be completed on a computer using the supplied documents or using project software as directed in each activity.

Internet access is not permitted.

All learner work must be completed independently and authenticated by the teacher/tutor and/or invigilator before being submitted to Pearson.

Centres are free to arrange the single session 3-hour supervised assessment period how they wish provided it is completed within the 1-week period scheduled by Pearson and according to the level of supervision specified.

Centres are responsible for putting in place appropriate checks to ensure that only permitted material is introduced into the supervised environment.

Maintaining Security

- During any break, materials must be kept securely.
- User areas must only be accessible to the individual learners and to named members of staff.
- Access to the internet is not permitted.
- Learners can only access their work under supervision.
- Learner work must be regularly backed up.
- Learners should save their work to their folder using the naming instructions indicated in each activity.
- Any work learners produce under supervision must be kept securely.
- Any materials being used by learners must be collected in at the end of the 3 hours, stored securely and handed back at the beginning of the Part B session.

Outcomes for Submission

Each learner must create a folder to submit their work. Each folder should be named according to the following naming convention:

[Centre #]_[Registration number #]_[surname]_[first letter of first name]_U3A

Example: Joshua Smith with registration number F180542 at centre 12345 would have a folder titled

12345_F180542_Smith_J_U3A

Each learner will need to submit 4 PDF documents, within their folder, using the file names listed.

Activity 1: activity1PID_[Registration number #]_[surname]_[first letter of first name]

Activity 2a: activity2gantt_[Registration number #]_[surname]_[first letter of first name]

Activity 2b: activity2resource_[Registration number #]_[surname]_[first letter of first name]

Activity 2c: activity2cost_[Registration number #]_[surname]_[first letter of first name]

An authentication sheet must be completed by each learner and submitted with the final outcomes.

The work should be submitted no later than 25 May 2018.

Instructions for Learners

Read the set task information carefully.

You must plan your time accordingly and be prepared to submit all the required evidence by the date specified.

You will complete this set task under supervision and your work will be kept securely at all times.

You may use a calculator and will have access to a computer. All activities must be completed using a computer.

There will be no access to the internet.

You must work independently throughout the supervised assessment period and should not share your work with other learners.

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[Centre #]_[Registration number #]_[surname]_[first letter of first name]_U3A

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Activity 2b: activity2resource_[Registration number #]_[surname]_[first letter of first name]

Activity 2c: activity2cost_[Registration number #]_[surname]_[first letter of first name]

You must complete an authentication sheet before you hand your work into your teacher/tutor.

Set Task Brief

You are asked to use your project planning and management understanding and skills within a given computing project scenario.

You work for M&M Developers as a Project Manager. You have been asked to manage a project for a new client.

The client Janet, the owner of *Lookas Bespoke Spectacles*, wants to replace her current paper-based records system.

This system is to be replaced with a database in order to cope with the demands of the growing business. She would also like a website that will link online sales and payments to the database.

In Part A you are required to complete project documentation to initiate and launch the project. In Part B you will monitor and control the project's progress to its completion and closure.

You are advised to spend 30 minutes reading the information, task instructions and the tasks you are to complete. You may make notes and/or highlight information to use in the completion of your project documents.

Information

Janet has requested a system that will:

- reduce record keeping errors
- allow her to easily manage customer details, order details and stock
- have a website that will allow customers to place orders.

She feels that the new system will:

- ensure at least 98% of orders are recorded accurately
- allow them to process 20% more orders each day
- increase the total orders by at least 5% due to the addition of online sales
- lead to a £6000 increase in sales per annum.

Martin, the owner of M&M Developers, has conducted a feasibility study. He has identified that *Lookas Bespoke Spectacles* needs:

- a relational database
- a custom website
- a custom database interface.

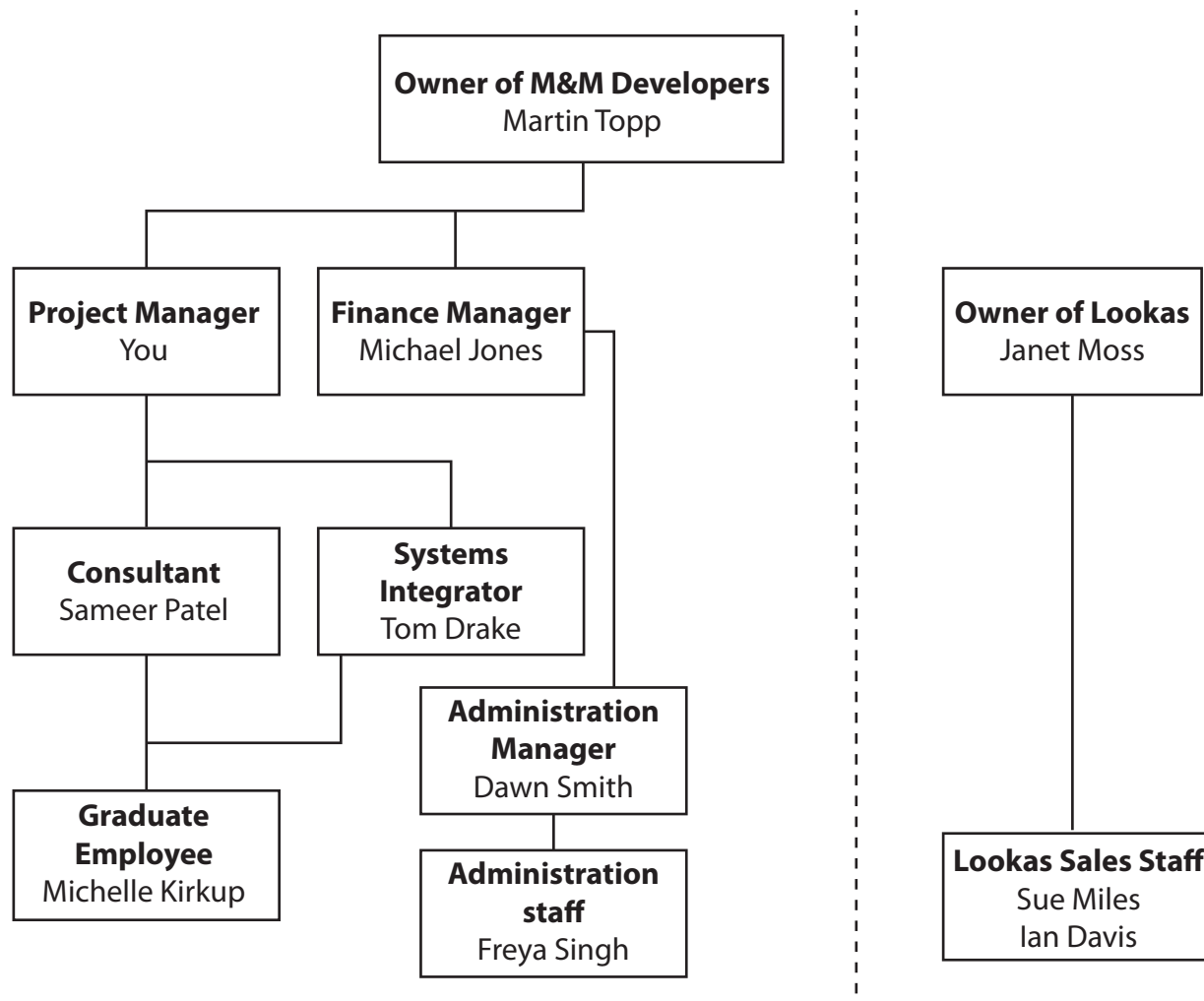
A start date for the project has been agreed as August 13th 2018.

The new system should be ready for use by October 8th 2018. It will then run in parallel with the old system for one month.

Janet has requested training for herself and one member of her Sales Staff. This training will take place during the one month parallel running.

The staff allocated to the project during parallel running will be yourself and a graduate employee, for an estimated period of five days in total.

M&M Developers and Lookas Bespoke Spectacles organisational structures



The consultant will do the analysis of the old system and the design for the new system. A time of two weeks for each of these stages has been agreed.

For other tasks the consultant will need four hours for a general function point and six hours for a complex function point.

The systems integrator needs five hours per general function point and seven hours per complex function point.

He will also develop a test plan for the new system. It is estimated that this will take four days.

The graduate employee needs six hours for a general function point and nine hours for a complex function point.

She will deliver the requested training. This will take three days.

It is estimated that initial testing of the system will take seventeen days.

It is assumed that no more than one major fault will be found in the system before handover.

It normally takes one day to find and rectify a fault and a further five days for regression testing.

A member of administration staff (Freya) will be available for two days to help with testing. The remaining time can be allocated to the consultant, the systems integrator or the graduate employee.

The owner of M&M Developers (Martin) has provided these details from his function point analysis of the project:

- Developing the website (12 general function points)
- Developing the database (15 complex function points)
- Developing the interface (8 general function points)
- Installing server and related software (2 general function points).

The finance manager has provided these costings to help you plan the project.

Extract from an email to you from the Finance section

Employee	Project Costing (per day)
Project Manager	£175
Consultant	£154
Systems Integrator	£135
Graduate Employee	£ 81
Administration Staff	£100

Your company employs its staff on a 35 hours per 5-day week contract.

It has been agreed M&M Developers will supply:

- Server hardware at a cost of £4,050
- Windows server O.S. at a cost of £550.

The project staff will need:

- Development laptops at a cost of £30 per day
- Tester laptops at a cost of £23 per day.

Cost of developing the training materials will be £250.

Lookas Bespoke Spectacles have a budget of £25,500.

Part A Set Task

You must complete ALL activities within the set task.

You are reminded that you need to produce your documents using a computer and software of your choice.

Your documents must be saved in your folder ready for submission using the formats and naming conventions indicated.

You need to complete your company's Project Initiation Document (PID) for the computing project.

Activity 1

Produce a Project Initiation Document for your project using the template **Project_initiation_Document.rtf**.

The 'Background to the proposed work' section has already been populated

Add further lines to the Project Initiation Document sections if required.

Save your PID as a PDF in your folder for submission as **activity1PID_[Registration number #]_[surname]_[first letter of first name]**

You are advised to spend 1 hour and 30 minutes on this activity.

(Total for Activity 1 = 22 marks)

Project planning documentation is needed to go with your PID. You need to produce a Gantt chart, resource list and cost plan for the computing project.

Activity 2

Produce the following project planning documentation based on the information provided in the set task brief:

- (a) a Gantt chart
- (b) a resource list
- (c) a cost plan.

Save your planning documentation as 3 PDFs in your folder for submission as

Gantt chart as **activity2gantt_[Registration number #]_[surname]_[first letter of first name]**

Resource list as **activity2resource_[Registration number #]_[surname]_[first letter of first name]**

Cost plan as **activity2cost_[Registration number #]_[surname]_[first letter of first name]**

You are advised to spend 1 hour on this activity.

(Total for Activity 2 = 14 marks)

TOTAL FOR PART A = 36 MARKS