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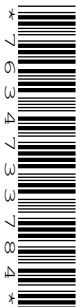
**A2 GCE APPLIED INFORMATION AND COMMUNICATION
TECHNOLOGY**

G048/IC Working to a brief

INSTRUCTIONS FOR CANDIDATES

For assessment submission

JUNE 2019



TIME

- These briefs are only valid for submission of marks to OCR in May 2019.

INSTRUCTIONS TO CANDIDATES

- You must use this booklet for guidance throughout your work for this unit.
- You must complete your project by the date set by your teacher.
- You must submit all your preparatory work with your solution to the brief.
- **All work submitted for assessment must be your own work.** You must read the Notice to Candidates on page 2 overleaf before you start your project. Where you have worked as part of a team you must clearly identify your individual contribution to the project.

INFORMATION FOR CANDIDATES

- The total number of marks available for the paper is **50**.
- You may start your preparatory work as soon as you receive this paper.
- There are no restrictions on computing facilities, hardware or software that may be used.
- This document consists of **8** pages. Any blank pages are indicated.

It is important that you discuss with your teacher anything that you do not understand.

NOTICE TO CANDIDATES

The work you submit for assessment must be your own.

If you copy from someone else or allow another candidate to copy from you, or if you cheat in any other way, you may be **disqualified** from at least the subject concerned.

Any materials (eg books, information from the internet that you have used to help complete this work) must be clearly acknowledged in the work itself.

- You must always keep your coursework secure and confidential while you are preparing it. **If it is stored on a computer network, keep your password secure. When printing work, collect all copies from the printer and destroy those you don't need.**
- When you hand in your coursework for assessment, you will be required to sign that you have understood and followed the coursework and portfolio regulations.

ALWAYS REMEMBER:

YOUR WORK MUST BE YOUR OWN

INSTRUCTIONS FOR CANDIDATES

Each of the following briefs has been written so that it may be completed alongside the Advanced GCE optional unit to which it relates. You **must not** use any other brief other than those listed in this booklet.

Read the briefs in this booklet. You must research and develop **one** of these briefs.

For assessment of this unit, you must produce evidence which **must** include:

- a preparatory report into current working practice
- a project plan in response to the set brief
- a diary or log of work completed
- support materials for use with the project
- an evaluation of your performance in relation to planning the project
- an evaluation of your performance in implementing the project
- an evaluation of your ICT solution to the given brief.

Whichever brief you choose, you will need to report on current working practices. Before you plan the structure and content of your project, you will need to carry out some research into working practices within the organisation. This research should enable you to plan a solution that works smoothly and with minimum disruption.

A project management plan will help you to organise your time efficiently. As a guide, the minimum requirements for the project management plan should include:

- key dates, deadlines and timescales
- how work may be managed in small sections or tasks
- organisation of information and resources
- time for reviews and modifications
- time for evaluation.

Full planning is vital to the success of the project. Full planning will also allow you to evaluate your work more effectively. There must be clear evidence of planning **before** you start your project.

While you are working on the project you must complete a diary or log. This diary or log should include:

- a full list of all tasks undertaken as part of the delivery of the project
- an assessment of your contribution to the success of the task
- the skills used in meeting the requirements of the task
- an assessment of how your skills needed to extend to meet the needs of the task – your discussion of your skills needs to include your use of working with others as well as ICT skills.

You will need to produce supporting materials. These may take any form and it is for you to decide what support materials your project needs.

Once you have completed the project, you will need to report on how well the project ran, what its strengths and weaknesses were and how well you worked with others. You should also suggest improvements to the project. You should collect feedback from users and the client in order to allow you to make informed comments about your project and the role that you played.

At the end of the unit, you must hand in:

- your report on current working practices
- your project plan
- your diary or log
- support materials
- your evaluation reports.

Make sure that all your work has your name, candidate number and centre number on each page.

Briefs

You may carry out the brief by working on your own or as part of a team. Where you are working on your own, the focus of 'working with others' becomes the clients or end users of the product. Where you are working as a team member, the focus may also include other members of the team.

You **must** develop a solution to **one** of the following briefs.

Brief 1

Air traffic controllers control the movement of aircraft around the world, allocating routes that allow a number of aircraft to be in the same section of airspace, whilst also remaining a safe distance apart. You have been asked to create a model that will be used as part of the training of air traffic control staff.

The model must focus on one section of airspace. The section of airspace is 50 miles in diameter and 8 miles high, measured from the ground (sea level). The section must include an airport.

Your model must allow the following details to be added for each aircraft:

- its unique identification number
- its starting location and height above sea level within the section
- its intended end location within the section (either leaving the section or landing at the airport)
- its speed.

The trainee must be able to add new aircraft to the system and identify suitable routes through the section of airspace. These routes will be based on the intended route of the new aircraft and aircraft currently in the section. The details of new aircraft could be handed to the trainee by an assessor on paper.

As an added feature, your model must include a function which allows aircraft to be entered onto the system in advance and appear randomly once an assessor has hit an on-screen button. This function is intended to measure how well trainees can react to situations beyond their control.

Your model must take account of other aircraft currently in the section. For modelling purposes, you should have a maximum of seven aircraft in the section at any one time.

Your completed product must model the movement of aircraft across the section of airspace, and identify when an aircraft is on course to come within five miles of another horizontally or within one mile of another vertically.

This task may be completed in conjunction with Unit G049: Numerical modelling using spreadsheets.

Brief 2

The Trew Valley Railway is a small railway network of five stations run by a team of steam train enthusiasts. The members of the team have noticed that their service is increasingly being used by commuters and want to encourage more commuters to use their service.

You have been asked to create a prototype of an interactive multimedia product that allows customers to:

- check on station facilities
- find the location of each station on a map
- check on the current location of trains on the network.

In the final version of the multimedia product, information about the location of each train will be gathered from a GPS enabled device placed on each train. However, for the prototype, you can use data included in your multimedia product to synthesise the movement of trains around the network.

This task may be completed in conjunction with Unit G050: Interactive multimedia products.

Brief 3

SportLocal is an organisation that promotes sport in your local area, both as a competitive sport and as a spectator event. You have been asked to create a booklet of at least 10 A4 pages or the equivalent about sport in your local area. Your booklet should include:

- information about each featured sport
- information about the teams or events that you are publicising, including contact details
- images and photographs.

This task may be completed in conjunction with Unit G051: Publishing.

Brief 4

You work for a design studio. The studio has been asked to design a Graphical User Interface (GUI) for a SmartPhone. The GUI will be used as part of the celebration of the 100 year anniversary of the Treaty of Versailles, which ended World War I.

You have been asked to develop a sample of work that can be sent to the client for approval. Your work should focus on the benefits of peace, understanding and collaboration.

The GUI must include versions of standard icons.

This task may be completed in conjunction with Unit G052: Artwork and imaging.

Brief 5

Pump and Go is a chain of five city centre gyms located in different cities in the UK.

You have been asked to create a website that can be used by prospective new members, to apply for membership, and by current members, to download information about classes and other events that are happening.

The website is to include the following facilities:

- a separate mini-site about each of the five gyms
- a search facility that links to each mini-site
- an online membership application form.

Each gym's mini-site should include:

- a location map
- images of the gym that show the unique nature of that gym
- a downloadable list of activities for the forthcoming fortnight
- a 'latest news' section.

This task may be completed in conjunction with Unit G053: Developing and creating websites.

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