

T LEVEL

*Technical Qualification in
Digital Production, Design
and Development*

Digital Production, Design and Development

Student Brief

Issue 1

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INTRODUCTION



This project is to help you prepare for your final assessment by giving you a realistic brief for a Digital Production, Design and Development design task and several activities for you to complete as you respond to the brief. The project is structured in a similar way to your final assessment and will give you opportunity to practice, improve your skills, and develop your understanding. You might complete the project as part of your classroom/independent learning, or in a controlled assessment environment like a 'mock' exam if your tutor believes this is most appropriate way to prepare for your assessment.

The project consists of four tasks covering a range of the Performance Outcomes. Each task includes activities that you may carry out individually or in groups. Your tutor will explain and guide you through the tasks and activities, using supporting resources, where applicable. This may include resources published by Pearson, and/or by using online industry links and examples of real design projects, to show how similar projects are delivered in context. If working within a group, we suggest that everyone contributes to each of the tasks in order to gain the experience and skills required for the external assessment.



MACCHIATO	2.50	3.00	4.00
LATTE	2.50	3.00	4.00
MOCHA	3.00	3.25	4.00
COLD BREW	3.25	3.50	4.50
HOT TEA	2.50	2.25	4.50

HOT CHOCOLATE

	8oz	12oz	16oz
HOUSE SYRUP	2.50	3.50	4.50
+50¢ vanilla / caramel / peppermint			

PROJECT SCENARIO

You work for Mantis Solutions, a software company based in the North of England. They have secured a contract for developing a digital solution for a new client, Bean and Brew.

Bean and Brew is a small local chain of cafes and coffee shops based around Harrogate and Leeds. They currently have the following venues and services:

1. Coffee shops
2. Small local cuisine restaurants
3. Baking lessons
4. Bakery takeaway

Bean and Brew were one of the first companies in the UK to use fair-trade coffee and all organic milk for their products. Each drink is made exactly to your specifications, for a personal service. They also offer their trademarked flavoured coffees, breakfast items such as porridge, small sweet treats, and pressed sandwiches. Recently they've also added frappes and fruit smoothies in addition to seasonal treats such as the pumpkin spiced latte (for Halloween) and various assorted baked goods.

THE BUSINESS NEED

The owner of Bean and Brew wants a digital solution developed to:

5. Book a space at one of the 3 local restaurants (Harrogate, Leeds, Knaresborough Castle)
6. Be able to pre-order a coffee for collection
7. Allow customers to pre-book (online) baking lessons

The client has carried out some market research to identify potential features that their existing customers suggested, these could be included in the final digital solution. The research identified the following:

8. Pre-order baked goods for collection
9. Customisable baked goods hampers
10. Creating customer accounts to speed up re-ordering
11. Social media posting/sharing features ('Rate my cake')





STAFF AND HUMAN RESOURCES

Bean & Brew

Owners: Sol Folata and Laura Hisoru

General Manager: Rachel Akhtar

Harrogate Store Manager:

Katherine Manzaneque

Leeds Store Manager: Cristina Neal

Knaresborough Store Manager:

Amina Parkes

Marketing Manager: John Rossa

Marketing Assistant: Gabriel Vlad

Head of Legal: Vinay Ruttu

Head of HR: Magda Rodriguez

Mantis Solutions

Project Manager: You

Lead Developer: Jayne Thomas

Software Developers: Kelle Penick,
Gwendelyn Cruack, Kinga Machnik, Harry
Summerlin, Alex Blair, Arden Reece,
Natalie Kudlinska

Testers: Maurice Muto, Angeles Ward,
Brandon Lamar, Gilmar Horan, Tiffany Dinapoli

TRIP ADVISOR PROFILE AND LOGO





STUDENT PROJECT BRIEF

TASK 1: ANALYSING THE PROBLEM AND DESIGNING A SOLUTION

In preparation for developing a proposal for Bean and Brew's digital solution, you have been asked to carry out research. Your research should consider how digital solutions are used to meet the needs of different users within the Food and Beverage Industry.

You will then use this research to create a design proposal for a digital solution and produce a set of design documents to showcase your solution to the client.

1. Produce a detailed proposal for the digital solution required by the client, and all current and new customers.

1. Your proposal should provide a rationale
 1. Overall Business context
2. The functional and non-functional requirements of the solution
3. A full list of the problems that need to be solved to meet all requirements.
4. The key performance indicators (KPIs) and user acceptance criteria for the proposed solution
5. A full description of the proposed solution

You should also justify how the recommended solution meets the needs of the client and users and how potential risks will be mitigated. You should also cover how relevant regulatory guidelines and legal requirements will be met.

2. Produce a set of design documents for the digital solution that you are proposing. The design documentation must include:

- Data Requirements
- Interface Designs
- Potential Algorithmic solutions
- Testing strategy

The solution you identify must be of enough complexity to demonstrate the ability to code and implement it in at least two languages that would be able to handle both front and back end processes.

The design documentation should contain enough detail to:

- Clearly allow the client to make an informed decision on the project
- Be able to communicate the solution to technical and non-technical stakeholders
- Allow an outside developer to use the documents to build the solution.
- Demonstrate the algorithm designs of most sections

The testing strategy does not need to cover all the tests required but should provide a selection of the required tests and an overview of the proposed solution.

It should also show:

- The testing order
- The required types of tests



TASK 2: DEVELOPING A PROTOTYPE DESIGN SOLUTION

Your manager has approved your design proposal for Bean and Brew and has asked you to move onto the stage of developing a prototype for your solution.

To help you develop a functional prototype, your manager has told you to refer to:

- Information from your design proposal
- The information provided in the Project Scenario

1.You must develop a functional prototype of your digital solution to meet the needs of the client.

During the development you must:

- Implement front-end and backend processes using at least two coding languages
- Create, find and utilise appropriate graphics
- Document the iterative development process
- Document iterative testing
- Produce the maintainable code
- Develop a quality user experience
- Make sure all regulatory and legal guidelines are followed

2.You need to develop a log of what you have been doing which contains:

- Records of the solutions
- Descriptions of the content and purpose
- Records of the date you retrieved the information

3.You now need to create a testing plan and log. Your testing documentation does not need detail all tests carried about but should demonstrate (using appropriate test data):

- An iterative approach to testing
- A full understanding of how to test
 - Inputs
 - Calculations
 - Validation
 - Processes





TASK 3: GATHERING FEEDBACK TO INFORM FUTURE DEVELOPMENTS

Your manager has asked you to gather a range of feedback on your prototype design solution and to report back to them. This will help you and your manager evaluate the prototype in terms of meeting the elements required for Bean and Brew.

- You will need to plan how you intend on gathering the feedback.
- Prepare and carryout a series of demonstrations to evaluate your prototype's functionality.
- Gather and record feedback in a suitable way that will allow it to be analysed.

1. Produce a plan for how you intend to gather feedback.

Your plan should include appropriate audiences and types of demonstrations that will need to be conducted in order to provide a level of assurance to the client (Bean and Brew) that the product will meet their requirements.

2. Using your finished prototype and appropriate tools, methods and techniques prepare and carryout a series of demonstrations to evaluate your prototypes' functionality.

Your demonstrations must be for:

- a technical audience, (e.g. programming professionals)
- a non-technical audience, (e.g. the client, the users)

3. Gather and record feedback in a suitable way that will allow it to be analysed.



TASK 4: EVALUATING FEEDBACK TO INFORM FUTURE DEVELOPMENTS

1. You have been asked by your manager to write an evaluation to the client to explain how the digital solution meets the client's requirements and their KPIs, as well as any user acceptance criteria you have required for the solution.

- How effective the content and assets are in meeting the needs of Bean and Brew.
- Explain the reliability and validity of the sources of information you used that were not created by you.
- Analyse and describe any legal and ethical implications of the assets and content selected.

2. Bean and Brew have asked you to talk through the design solution and recommend ways it could further be developed.

Your presentation should contain ways to prevent and identify foreseeable issues such as:

- Changes to the regulatory requirements
- Changes in business processes
- Compatibility with new technology

Iterative development of the digital product to maintain its relevance.



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