# starter

**Functional Requirements:**

1. **Course information & Search**  
   Detailed listings of courses offered across all campuses, with filters by subject, level, location, and study mode.
2. **Campus Information**  
   Pages dedicated to each campus with details on facilities, transport, and contact information.
3. **Student Services Access**  
   Easy access to support services like mental health, careers advice, safeguarding, and disability support.
4. **Application and Inquiry Forms**  
   Online forms for course applications, inquiries, event registrations, and contact.
5. **Accessibility Features**  
   Tools to assist users with disabilities—screen reader support, keyboard navigation, text resizing, contrast modes.

**Nonfunctional Requirements:**

1. **Performance & Scalability**  
   Fast load times; ability to handle high traffic, especially during enrolment periods.
2. **Security**  
   HTTPS encryption, protection of user data, secure form submissions, and compliance with GDPR and other regulations.
3. **Mobile Responsiveness**  
   Fully functional and visually optimized across all devices (smartphones, tablets, desktops).
4. **Maintainability**  
   Built on an easy-to-manage CMS ([customer management system](https://bedfordcollege-my.sharepoint.com/personal/725271_student_tresham_ac_uk/Documents/year%202/lisa/A%20Customer%20Management%20System%20(CMS).txt)) allowing non-technical staff to update content quickly.
5. **Accessibility Compliance**  
   Meet WCAG 2.1 AA standards, ensuring equitable access.

**Key Performance Indicators (KPIs):**

* Course Page Views
* Search Usage and Conversion Rate
* Form Submission Rates (applications, inquiries, event sign-ups)
* Accessibility Feature Usage Rate
* Page Load Time and Overall Site Speed
* Cost efficiency
* student productivity
* success rate – number of pass or fails, how successful is the collage

# Main

## Task 1 – user acceptance

User acceptance criteria:

* Clear concise and testable conditions that a product or feature must meet to be considered complete and accepted by a user.
* Defines the desired outcome and not the implementation.
* Often written in a ‘Given, When Then’ format
* Shared between developers, product managers and users, minimizing understandings and reducing rework. - from Lisa's power point presentation

## Task 2 – User story

A user story is a concise, non-technical description of a software feature or functionality written from the perspective of the end user. It is a fundamental component of agile methodologies, designed to articulate how a specific feature will deliver value to the user. Unlike traditional system requirements, user stories focus on the why and what rather than the how.

## Task 3 – user example

|  |  |  |
| --- | --- | --- |
| user | want | criteria |
| First time user  (Riley) | Wants to view selection of coffee | Website should display everything menu related such as coffee types out for limited time and which combinations are available or out of stock. |
| First time user  (Lochlan) | Wants to pre-order and pick up on the way | Should show a menu and allow me to pick from and allow to be picked up for collection |
| First time user  (Lochlan) | Wants to book a baking lesson | Should give the days that baking lessons take place on and allow the user to be able to book the day or hour depending on how they want to do it should also be allowed to cancel |
| First time user  (Riley) | Wants to book a space at a certain cafe | Should give open times for each location and specify which is being booked for. User must be able to cancel or postpone bookings after making one. |
| First time user (Riley) | Wants to post something on cafe social media | Should publish “rate my cake” posts, tag the creator and show the improvement people can make from baking sessions. |
| Repeat user (Lochan) | Be able to save time by having an account | The website should allow users to make an account and be able to sign in, should also remember and save the users' last order |
| Repeat user (Riley) | Be able to buy the same order of coffee without having to customize it again it should be remembered | User should be able to buy same type of coffee multiple times without error. Or needing to put in the order all again and re-customize it |

## Task 3a – Given, When, Then

LM

Given: Users want to order the same coffee they did yesterday

When: they enter their repeat order

Then: order should be accepted and confirmed

Given: user is on the baking booking page

When: they book their date and time

Then: they should get conformation of their booked date and time

Given: user wants to customize coffee

When: they click on their coffee

Then: give them different options to choose from

Given: wants to collect coffee

When: They confirm their order

Then: They get conformation and a code for collection

RM

Given: Users want to book a cafe at 1 of the 3 given locations.

When: User is given the choice of which cafe to book

Then: booking should be saved for selected date.

Given: Users want to leave a review on cafe website

When: User is required to leave a star rating and description

Then: review should be submitted and published onto website.

Given: User wants to create customer account to decrease ordering time

When: User is asked to fill in account details

Then: account should be created, and orders should be quicker

Given: User wants to order takeaway delivery from cafe to another location

When: User is asked to fill in location details

Then: Delivery can be carried out to customer.

# PT 2

## Final proposal

### 1.What is it

The Purpose will be creating a website with a database

### 2.Key features

The key features are:

* allowing pre-bookings for coffee, pre- order baked goods and baking lessons
* Book a space for one of three restaurants
* Be able to have a customisable baked goods hamper
* Have customer accounts to speed up and optimised performance
* To have people post on social media under the tag “Rate My Cake”

### 3.Justification

Features can be justified by:

* Relevance to the client's specifications
* The benefit of it to the website
* The ensure the website and the data from the website is secure
* Optimising the websites performance
* To Maximise the number of people viewing the website
* To refine the profit margin for the client

### 4.risks

Some risks to be mitigated could be:

* How secure the website is for a user and ensuring protection. - Nobody can interfere when a user accesses the site.
* How fast can the website be viewed when clicked on by user. - Refrain from using high storage(data) graphics when designing website.
* Is the website simple enough for a non-technical user to understand? - Design it from a general perspective and avoid using complex terms so users don't get confused.
* Lack of communication between the client and provider. Make sure that client needs are being focused on as a main priority.
* The duration of the downtime for the website. - Have maintenance to ensure system is functioning
* Has it been optimised for different devices e.g. Mobile, laptop, computer, tablet etc...

### 5.issues and guidelines

Some issues and guidelines to be addressed could be:

* Security issues could be addressed by restricting access to sensitive user data and utilising more or better encryption software.
* Ensuring that copyrighted material isn’t being used for the website without permission.
* Confirming that the website has a private connection established.

### 6.Emerging tech

Recommendations:

* Could use an online payment system
* Could add a collection number or code to make collection more straightforward
* Could implement the use of AI to increase efficiency of repeat orders and could also recommend items based on a person's past ordering
* Could start to investigate or implement a robotic aspect e.g. non-human workers in certain positions to see how they fare and may increase speed production- however the problem with this one is that people may not like the idea of the non-human interaction
* Could use the cloud to store data so its automatically backed up and therefore could lessen the risk of losing data

# PT 3

Home page – general knowledge, seasonal items (such as Halloween and Christmas e.g. pumpkin spiced latte), the best reviews Aswell as any sales– **Justification** – As the home page is the index and the first page loaded, we want to have the promotions on the front page such as offers, sales, and seasonal promotion including different drinks e.g. cinnamon latte/coffee

About – ratings, reviews – **Justification** - Users are given a reference from other parties (users, companies etc.) To find out if the services can be trustworthy.

Menu – cost, items – **Justification -**This is important because the user can be influenced to purchase items from the coffee shop if products are affordable in their price range.

Booking – book, cancellation, postponement - **Justification –** This helps the user to make bookings remotely without having to leave their home. It is also beneficial to the user experience if the booking system allows them to delay or remove times paid for within the schedule.

Contact – Email, phone number – **Justification –** so they can contact us with any problems or complications, so we are able to rectify them as soon as possible

Create account – email and password – **Justification –** Adding an account will support the user’s experience with the coffee shop because it allows their orders to be completed more time efficiently and may also provide other benefits. (For example, being notified by the company whenever a new item is released on the menu.)

# PT 4

## Starter

The purpose of an ER Diagram:

Is to provide a visual blueprint for database design, showing the entities (objects or concepts)

The purpose of a Data dictionary:

provide a structured framework for understanding data assets.

It serves as a central storage that documents metadata, ensuring consistency and clarity across data management practices.

## Main

ER Diagrams:

In folder

Data dictionary:

In folder

Context and data flow diagram:

