

FOR COLOUR SCHEME USE WebAim website. Link: <"Link">

Design documentation for the project

Topic: Analysing the problem and designing a solution

Evidence: Proposal of the designed solution; A set of design documents

Time: 20 hours

2 Business Context & User-Centric Aspects – 3 hours

- Business Context (30 min)
- Empathy Map (30 min)
- User Stories (30 min)
- Functional Requirements (30 min)
- Non-functional Requirements (30 min)
- Security, Maintainability, Performance, Usability (1 hr total)

Task 1 A (ii)

Business Context

Main Tip: For this task, you have to explain why you have been 'hired' to help the client. Explain;

- what the client does
- why the client wants your services (leaning towards their main goal, i.e. engaging new clients)
- what the client wants you to make (what they have literally asked you to make)

Most of this task is already done for you, since all of the information you need is already there, you just need to put it together neatly.

Examples: Our client, Riget Zoo Adventures (RZA), is a well-established business that is interested in digitalisation in

order to keep existing customers satisfied as well as engaging new clients, Currently RZA offers a safari-style wildlife zoo, an on-site hotel and educational visits. A client is looking for a digital solution that

would information about attractions and facilities, materials to support educational visits and allow users

to book tickets and stays in the hotel.

I am proposing to develop an interactive website that would include all the features that the client

requires and some more. In the following passages I will be explaining and justifying my proposal.

Riget Zoo Adventures is a wildlife park and tourist attraction aiming to provide an educational and engaging experience for visitors, focusing on animal conservation and sustainable tourism. The zoo attracts many local and international visitors annually and is looking to enhance their visitor experience, improve operational efficiency, and increase customer engagement using digital technologies.

Sources to use:

Examiner reports:

SWOT Analysis

Main tip: SWOT stands for Strengths, Weaknesses, Opportunities, and Threats.

What you need to do is list all of the above in the format you prefer, a table is easier to visualize.

- Strengths - think of personal strengths within the company, i.e. their team or skills that they are proficient with.
- Weaknesses - personal weakness within the company, i.e. limited budget or outdated equipment.
- Opportunities - these are similar to strengths but from the outside, things that the company *usually* can't control, i.e. Demand for digital technologies.
- Threats - similar to weaknesses, but from the outside, i.e. Increased competition from similar companies.

Strengths	Weaknesses
<ul style="list-style-type: none"> • Agile team that can quickly adapt to client needs • Strong portfolio of work in the SME niche • We're also getting very good at creating funny scripts and concepts (i.e: full creative not 'just production') 	<ul style="list-style-type: none"> • Limited budget for marketing and business development • Heavily reliant on a small number of key clients • We struggle to serve clients that want a lot of content over time (vs. big one-off shoots)
Opportunities	Threats
<ul style="list-style-type: none"> • Growing demand for video content across industries - Reels and TikTok still growing fast • Potential partnerships with marketing agencies • Expansion into new geographic markets - developing freelance shooter network in N.Am, Aus/NZ 	<ul style="list-style-type: none"> • Increasing competition from freelancers and larger agencies • Bigger clients are bringing video production in-house • Smaller clients are more confident in self-shooting for social • Non-zero chance that TikTok is banned outright

Examples:

1. Strengths
 - a. **Engaging Content:** The website offers a variety of interactive and educational content, such as animal facts, videos, virtual tours, and conservation information.
 - b. **User-Friendly Design:** The website is easy to navigate, with a clear layout that allows visitors to quickly find information about ticketing, exhibits, events, and more.
 - c. **Online Ticket Sales:** Convenient online ticketing system that helps reduce long lines and offers special discounts or promotions.
 - d. **Community Engagement:** Provides opportunities for users to donate, adopt animals, and participate in community events, fostering a sense of involvement and support.
2. Weaknesses
 - a. **Limited Accessibility Features:** The website may not fully cater to people with disabilities (e.g., lack of screen reader compatibility or language options).
 - b. **Lack of Multi-Language Support:** The site may only be available in one language, limiting accessibility for international audiences.
 - c. **Slow Load Times:** Some pages or high-quality media may take longer to load, which could frustrate users and drive them away.
 - d. **Inadequate Search Functionality:** The search bar may not always yield the most relevant results, making it harder for users to find specific information.
3. Opportunities
 - a. **Virtual Animal Encounters:** Expand virtual zoo experiences like live-streamed animal feeds, behind-the-scenes tours, or interactive Q&A with zookeepers, which could attract more global visitors.
 - b. **Increased Focus on Conservation:** Highlighting the zoo's conservation efforts through blog posts, videos, and donation opportunities could resonate with eco-conscious visitors and increase support.
 - c. **Partnerships with Schools:** Creating educational resources and programs for schools could lead to increased traffic, both from teachers and students.
 - d. **E-commerce Opportunities:** Adding an online store with zoo-themed merchandise or even tickets and memberships could create an additional revenue stream.

- e. **Enhanced Social Media Integration:** Integrating live social media feeds or user-generated content (e.g., visitors' photos and reviews) on the website could increase engagement and drive traffic.

4. Threats

- a. **Competition from Other Attractions:** Other family-friendly attractions (museums, aquariums, theme parks) may have better marketing or offers, drawing attention away from the zoo.
- b. **Economic Factors:** Economic downturns or changes in disposable income may reduce overall visitorship to the zoo, affecting both online and on-site engagement.
- c. **Technology Issues:** Technical glitches or outdated infrastructure could result in downtime, leading to poor user experience or loss of potential ticket sales.
- d. **Environmental or Animal Welfare Concerns:** Negative press regarding animal welfare or environmental impact could harm the zoo's reputation and online image.

Security Risks: Data breaches or security vulnerabilities, especially in online transactions, could damage user trust and the zoo's credibility.

Sources to use:

Examiners report:

Stakeholders

Main tip: Explain the people that hold a stake in your company, public, managers, staff, etc.

You need 2 sections, one for explaining your general stakeholders and one for explaining your primary stakeholders.

Explain how it will affect your solution, if it will at all, and you'll be good to go.

Just write a list of stakeholders and then explain how and why they have a stake in the business, Don't worry if it doesn't look like a lot, it's a very small task.

Examples: Direct Stakeholders + Empathy Map

Customers (car buyers and sellers)

Needs:

Easy navigation, detailed vehicle information, secure payment process, transparent pricing

User Story:

"As a first-time car buyer, I want to easily browse and compare different car models on CarMax's website so that I can make an informed decision about my purchase."

Empathy Map:

Think & Feel: Excited about purchasing a new car but anxious about making the right choice and finding good value

See: Car listings, prices, specifications, competitor websites

Say & Do: Research vehicles online, ask friends for recommendations, visit

dealerships

Hear: Advice from friends, marketing messages, sales pitches

Pain Points: Uncertainty about vehicle history, negotiating prices, lack of transparency

Employees (sales representatives, mechanics, customer service)

Needs: Access to inventory data, customer management tools, communication Systems

User Story: "As a sales representative, I want to quickly access vehicle and customer information so I can provide personalized assistance and close sales efficiently."

Empathy Map:

Think & Feel: Motivated by sales targets, wants to provide good customer service

See: Customer inquiries, inventory updates, sales performance metrics

Say & Do: Answer customer questions, showcase vehicles, process transactions

Hear: Customer concerns, management directions, performance feedback

Pain Points: System downtime, incomplete information, difficult customers

Shareholders and investors

Needs: Profitability, growth, competitive advantage in the market

User Story: "As an investor, I want to be provided with up to date information about the company through a newsletter."

Empathy Map:

Think & Feel: Concerned about ROI, market position, and long-term growth

See: Financial reports, market trends, competitor performance

Say & Do: Analyze financial data, ask about strategic initiatives, evaluate business performance

Hear: Quarterly reports, industry news, management presentations

Pain Points: Market volatility, insufficient transparency, slow adaptation to market trends

Indirect Stakeholders

Local communities where CarMax operates

Needs: Economic benefits, employment opportunities, responsible corporate citizenship

User Story: "As a community member, I want CarMax to provide local employment opportunities and contribute to community initiatives."

Empathy Map:

Think & Feel: Concerned about local economy and environmental impact

See: Job postings, community involvement, business expansion

Say & Do: Apply for jobs, participate in sponsored events, provide community feedback

Hear: News about company growth, charitable activities, environmental practices

Pain Points: Traffic congestion, environmental concerns, unfilled promises

Sources to use:

Examiners report:

User Stories

Main tip: User stories are made to explain what the user wants and why they want it, this also allows you to plan what your system needs.

You should do one for a;

- First time customer
- Student
- Parent
- Loyal customer

(You can also do ones for different users, i.e. teacher)

You need to talk about 3 things;

- What the user wants
- Why the user wants it
- The acceptance criteria

Examples:

As a [user]...	I want ...	So that ...	Acceptance Criteria
First time customer	To visit a website and find some information on what the zoo is offering.	I can compare it with other zoos and see why I should choose this one, as well as that I would be able to see if	The system should allow user to see the clear navigation bar at the top, in the main section there should be

	Book my tickets quickly online.	there are animals that I am particularly interested in. I will not have to wait in the que for tickets, when I visit.	a carousel in the main section that will prompt users to all the other sections. When user visits the about page, all of the necessary info will be displayed in there such as how to get here, opening times, animals, facilities, hotel info. On the top right corner there will be a "Book" button that will prompt user to the booking page, it could be a ticket booking or a hotel booking.
Student	To visit website that is easy to follow and does not have unnecessary information, I also want to find educational trip section on there where I can browse and get all necessary materials for my trip, for ex book that describes all the animals that I'm going to see in the zoo.	When I am on my trip I was fully aware of what is going on and had enhanced experience, I also want to learn more when I'm on the trip.	The system should provide the educational visits page for students. On this page there should be a catalogue of things that they might need while on the trip.
Parent	To book a hotel and tickets in advance	I'm sure that when I come with my children we will have where to stay, and I will not need to drive all the way back home the same day.	In the booking area there is an option to book a hotel.
Loyal customer	To have a discount when I visit for the second time. To have my account where I would see how when I have visited. And to be able to cancel my future bookings if I need to do so.	If I visit multiple times, I can save some money. I also want to feel a more personalised experience.	The website should contain an option to create an account and login. When user is on any of the pages, he/she should be able to easily navigate to the Account section. When on the Account page, user should be able to Manage bookings, have reward for each visit. See his/her previous visits.

Sources to use:

Examiners report:

User Acceptance Criteria

Main tip: You can combine this with the User Stories.

This is to specify what the user thinks is acceptable of the website. For example;

- The website is quick to load
- It should have appropriate images
- It should be easy to navigate
- The website should look nice

Of course, if you want to do it separately, go ahead, though it is easier to integrate it within the user stories.

Examples:

Sources to use:

Examiners report:

UML Case Diagrams

Main tip: This is for visualizing how different users interact with the system. UML diagrams can help outline user interactions and plan features.

You must always put everything in a big box, a.k.a. the System Boundary. Every 'UseCase' is in the ovals, so everything the user is interacting with and can do. The stick men are 'Actors' which is what you use to represent the end points of everything, the user, the payment service, authentication service, paypal, etc.

The '<<Include>>' means that the use case, that the arrow is pointing to, *includes* the functionality of another use case, the one the arrow is coming from.

The '<<Extend>>' means that the use case, that the arrow is pointing to, is an extension of functionality of another use case, the one the arrow is coming from.

Examples:



Sources to use: *Geeks for Geeks* - <https://www.geeksforgeeks.org/use-case-diagram/>

Examiners report:

Empathy Map

Main tip: An empathy map is to show what your users will be saying, thinking, doing, and feeling. Usually, you pick a stakeholder to do it about. However, you can do it generally for everyone.

The easiest way to do one is to try and think as one of the users and write down what you are;

- Saying - What have we heard them say? What can we imagine them saying? What's their attitude?
- Thinking - What really matters to them? What do they want? What are they having trouble with?
- Doing - What can we imagine them doing? What are their behaviour?
- Feeling - What are their frustrations and anxieties? What are their needs?

Examples:

<p>Says</p> <ul style="list-style-type: none"> - I need more information before visiting this zoo. - Could I buy a book that has all the animals description, so I get to learn while I'm on my educational trip as well? - Could I book my tickets and book a hotel in advance via website? - Could I create my account so I could manage my bookings? I need to cancel my booking for this Saturday because my child is not feeling well. 	<p>Thinks</p> <ul style="list-style-type: none"> - I wish there was a website where I could see all the animals, it would be easy to decide if I want to go this zoo - It would be so much easier if they just had a booking system and I could book a ticket in advance instead of standing in the line for hours. - I would rather book a hotel in advance, what if there are no rooms left when we visit. - Oh, I wish I had more personalised experience, I wish I had my own account. I don't want to lose my money just because I couldn't cancel my visit.
<p>Does</p> <ul style="list-style-type: none"> - Comes to the zoo with very little awareness - Comes to visit, but the zoo is too full today - Comes to visit and finds out that the hotel is overbooked 	<p>Feels</p> <ul style="list-style-type: none"> - Overwhelmed - Confused - Stressed and annoyed because of the que to by ticket - Willing to be reassured that the hotel is booked for the time they come

Sources to use:

Examiners report:

Functional Requirements and Non-Functional Requirements

Main tip: If you *really* need to know how to do them

Functional requirements are what the website *needs* to do what it its made for, the bare minimum that lets it do its job

Non-Functional requirements are any extras for the website, anything that *adds* to its original function. Usually for user experience and quality of life.

Examples:

- **Functional:**

Mobile App and Website Integration

Users can view exhibit information, schedules, events, and purchase tickets through the app or website

A virtual tour guide feature using GPS to help visitors navigate the zoo

A personalized user experience, allowing families or groups to create a custom itinerary for their visit

Integration with an online payment system for easy ticket purchasing, event bookings, and donations

A real-time notification system for important alerts (e.g., animal feedings, special events, weather conditions)

Ticketing and Membership Management

The system should enable online booking for tickets, season passes, and special events

Offer discounts, loyalty rewards, and membership features for repeat visitors

Visitor Analytics

Track visitor preferences, most visited exhibits, peak visit times, and customer behaviour

Provide insights for marketing and operational adjustments.

Educational Features

Interactive learning tools such as quizzes, animal facts, and videos accessible through the app

AR (Augmented Reality) features to bring animal exhibits to life for educational purposes.

- **Non-functional:**

Scalability The solution should be able to handle high volumes of traffic during peak seasons (e.g., weekends, holidays)

Security Secure user data protection, including personal information, payment details, and member records.

Performance Fast load times for mobile apps and websites to ensure smooth navigation and transactions.

Accessibility Comply with accessibility guidelines (WCAG) to ensure the app and website are usable by all visitors, including those with disabilities.

Reliability 99.9% uptime for the platform, ensuring continuous service during operation hours.

Compatibility The app should be available on both iOS and Android, with a responsive website accessible on desktops and mobile devices.

Sources to use:

Geeks for Geeks-<https://www.geeksforgeeks.org/functional-vs-non-functional-requirements/>

Examiners report:

Decomposition of problem

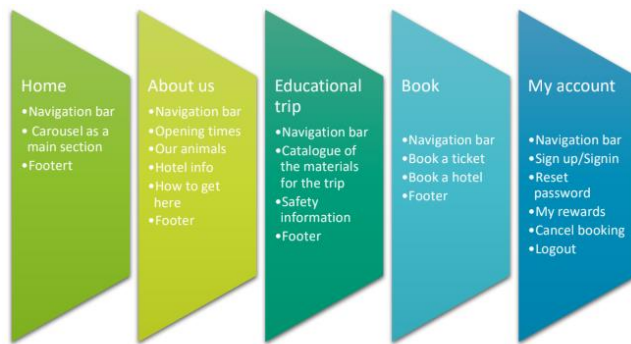
Main tip: This to decompose the functional and non-functional requirements that you have done previously.

You can decompose the problems how you'd like to, some ideas;

- Table - has the columns for the feature, priority, and justification.
- Flow charts - very basic flowcharts for each problem, giving steps for the user and server.
- Within the requirements - Flow charts, tables, etc. within the functional and non-functional requirements.

You should also decompose the site pages with what they contain.

Examples:



Sources to use:

Examiners report:

TechStack of Solution

Main tip: Just list the things you will use, and use in theory.

You need to specify what you are using for the front end, back end, and any APIs. You will also need to explain what each of them are and what it does.

If you are normal, you will be using HTML, CSS for front end (some tailwind maybe), MySQL and PHP for the backend. Of course, in theory, we can use AWS for the backend to host the website, also in theory, we can use stripe for payments and some kind of authenticator API for 2FA. However, these are optional.

Examples:

Tech Stack



Front End:

- React; this combines JavaScript and HTML to easily make responsive components, which can be easily added to your website as custom elements.
- HTML; this is simple HTML to make websites, combine elements in different ways to make complex and responsive elements.
- CSS; the main language for styling HTML elements and making the front end of the website looks nice.
- Tailwind CSS; it adds lots of pre-made classes to quickly style elements on the page.
- JS; javascript lets you code things for functions and specific events.

API:

- Stripe; Stripe is an API to take credit and debit card payments.
- Google Authenticator; This is very useful for an easy 2FA set up.

Back End:

- PHP; PHP is used to link databases and APIs to websites easily, it has similar syntax to JS and is mainly used for linking databases to the website.
- MySQL; MySQL is a database management service that allows you to create large databases and store+pull data from them.

-
- AWS; Amazon Web Services is used for website hosting.

Sources to use:

Examiners report:

Key Performance Indicators (KPI's)

Main tip: Key Performance Indicators (KPIs) are measurable values that assess how effectively a project or system meets its objectives. They should be based on SMART goals (Specific, Measurable, Achievable, Relevant, and Time-bound) to ensure that evaluations are objective and fair.

KPIs must cover non-functional requirements, ensuring that all critical aspects of performance are met.

A key idea of KPIs is that they must be quantitative instead of qualitative, allowing for clear measurement and comparison.

Examples:

- KPIs:

- User Engagement Rate** Measure how often users interact with the app's features (e.g., viewing exhibits, using the navigation, booking tickets)
- Conversion Rate** Track the percentage of app visitors who make a purchase (ticket or membership)
- Customer Satisfaction (CSAT)** Collect feedback from visitors about their experience using the app
- App Retention Rate** Monitor how many users return to the app after their first visit
- Peak Traffic Handling** Assess system performance during peak visitor periods (load time, response time)

Sources to use:

6 Appendices – 1 hour

- Hardware & Software (20 min)
- Emerging Technologies (20 min)
- User Needs, Guidelines & Regulations (20 min)

Emerging technologies

Main tip: To show which new technologies can be included

Examples:

Hardware and software

Contactless payment

One of the most significant advancements is the rise of contactless payments. Additionally, customers may not always have their credit or debit cards with them or immediate access to cash. Offering cashless transactions enhances accessibility, as most people carry smartphones, while also streamlining the process, saving time and effort for both customers and employees.

Voice control

Integrating voice control and voice search features is a major leap toward enhancing accessibility in the travel industry. Many apps were previously inaccessible to individuals with visual impairments, but voice-enabled functionality opens the door to a wider audience. Beyond improving the booking experience, voice controls can make travel more interactive and engaging.

Emerging technologies

Augmented Reality (AR) for Enhanced Travel Experiences

To stay competitive, travel and tourism companies must embrace augmented reality (AR) as a key part of the customer experience. The AR market is expected to grow emphasizing its rising significance in the industry. This rapid expansion highlights AR's crucial role in boosting customer engagement while giving businesses a competitive advantage in the travel and tourism sector.

Interactive Maps

In today's interconnected world, advanced mapping software has become essential, transforming how we navigate and interact with our surroundings. By 2025, mapping technology has evolved beyond simple directional guidance, offering businesses and users a more immersive and dynamic experience. These interactive solutions integrate real-time data, satellite imagery, and machine learning algorithms to deliver highly accurate, up-to-date maps.

Sources to use:

Examiners report:

5 Justification & Compliance – 2 hours

- Description of Proposed Solution (30 min)
- Justification (30 min)
- Meeting Client Needs (30 min)
- Risk Mitigation (30 min)
- Regulatory & Legal Compliance (30 min)

Legal Regulatory and Ethical Considerations

Main tip: GDPR, COPPA, COOKIE LAW

EQUALITY ACT, ACCESSIBILITY

ETHICAL USE OF IMAGES+TEXT

Examples: Principles

Lawfulness Data must be acted with and gathered lawfully, and used in ways the user can expect.

Purpose Limitation Data purpose must be made clear and only collected if user agrees.

Data minimisation Data must be necessary for the purpose you gathered it.

Accuracy Inaccurate data is never kept, and data is updated.

Storage limitation Any unnecessary data is deleted.

Integrity & confidentiality Responsibility for ensuring data security is made clear. Actions are taken to ensure data security

Accountability Compliance must be demonstrable.

Sources to use:

Examiners report:

Proposed Solution Description

Main tip: For this task you will be summarizing what you have done above and explain the main benefits it will have for the client.

Examples:

Sources to use:

Examiners report:

Rational Proposal

Main tip:

Examples:

Sources to use:

Examiners report:

Examiners Report:

Task 1 Activity A (ii) – The Proposal

Indicative content and marker guidance		
Students produce a proposal for a digital solution that they could develop to meet the needs of Riget Zoo Adventures (RZA)		
<p>Students' proposals should be relevant to key requirements of the brief such as:</p> <ul style="list-style-type: none"> • Providing customers with help and information about the attractions and facilities • materials to support educational visits: • Online booking system. • account registration to allow customers to manage their bookings • Loyalty and reward scheme: • accessibility features to support a wide range of users <p>The students' proposals may refer to:</p> <ul style="list-style-type: none"> • How the solution will handle data and pass it between back end and front end • How they will address issues/needs such as: • Providing customers with help and information about the attractions and facilities <ul style="list-style-type: none"> ○ Interactive map ○ Real-time updates (e.g. closures, feeding times) • materials to support educational visits: <ul style="list-style-type: none"> ○ Multimedia features ○ Tasks and activities ○ Content management system • Online booking system: <ul style="list-style-type: none"> ○ Reserve and book tickets for zoo ○ check availability and book a stay at the hotel. • account registration to allow customers to manage their bookings • Loyalty and reward scheme: <ul style="list-style-type: none"> ○ Back-end for company (e.g. targeting customers, dashboard of information) ○ Customer facing features (e.g. account management, offers) ○ accessibility features to support a wide range of user • Digital content (e.g. Interactive map, quizzes, videos of animals, info about hotel rooms, hotel services) • Accessibility features (e.g. alt text, resizable fonts, selectable colour schemes) – Possible reference to W3C 	<p>Students' proposals should refer to relevant risks and how they will mitigate these such as:</p> <ul style="list-style-type: none"> • Malicious/inappropriate use – data input validation • Intercepting data / man in the middle attacks – use of SSL/Encryption/HTTPS. • Cross site scripting – content security policy/data input validation and sanitization. • SQL Injection – Sanitizing data input. • Anonymising data – privacy issues relating to loyalty scheme, personal info from ticket booking/hotel stays. • Mitigating localisation of data e.g., planning routes around the zoo, tracking location to maximise flow of people, booking specific times to visit busy/popular attractions. <p>Students' rationale should refer to wider issues which are likely to include:</p> <ul style="list-style-type: none"> • General issues such as: <ul style="list-style-type: none"> ○ Privacy ○ User support ○ feedback to users-errors (e.g. incorrect completion of forms, completion of transaction etc) • Potential context-specific issues such as: <ul style="list-style-type: none"> ○ handling of personal and sensitive health data ○ users may be vulnerable due to specific health issues ○ licensing of APIs vs open-source data • Relevant regulations and guidelines (e.g. W3C, professional bodies, health advice/disclaimers) as well as legal requirements relating to software development and the context of the health industry. 	<p>Students' rationale should be relevant to current practice and/or emerging tech in the leisure and tourism sector</p> <ul style="list-style-type: none"> • Apps and mobile devices • Maps and location-based services • Payment services (e.g. entry fees, purchases in the park, voucher and loyalty rewards) • Websites • AI – e.g., insights into busy times of day and potential busy dates. <p>Students' rationale should include details of the functional and non-functional requirements, key performance indicators, user acceptance criteria that could be used to judge the success of a solution that they will implement. They must be appropriate for a solution that will meet the needs of</p>

Assessment focus	Band 0	Band 1	Band 2	Band 3
	0	1-3	4-6	7-9
Decomposing the problem	No rewardable material	<p>The proposal:</p> <ul style="list-style-type: none"> identifies some of the problems to be solved Effectively decomposes some of the problems identified <p>The proposed solution would effectively:</p> <ul style="list-style-type: none"> meet some of the needs of the client and users mitigating some of the potential risks addressing some of the relevant regulatory guidelines and legal requirements, in relation to software development and the industry. 	<p>The proposal:</p> <ul style="list-style-type: none"> Identifies most of the problems to be solved Effectively decomposes most of the problems identified <p>The proposed solution would effectively:</p> <ul style="list-style-type: none"> meet most of the needs of the client and users mitigate most of the potential risks address most of the relevant regulatory guidelines and legal requirements, in relation to software development and the industry. 	<p>The proposal:</p> <ul style="list-style-type: none"> Fully identifies the problems to be solved Effectively decomposes the problems identified <p>The proposed solution would effectively:</p> <ul style="list-style-type: none"> meet the full needs of the client and users mitigate the potential risks address relevant regulatory guidelines and legal requirements, in relation to software development and the industry.
Appreciation of wider issues in the context		<p>The proposal provides limited lines of reasoning that partially justify how:</p> <ul style="list-style-type: none"> the recommended solution meets the needs of the client and users potential risks will be mitigated the proposed solution will address relevant regulatory guidelines and legal requirements, in relation to software development and the industry. 	<p>The proposal provides good lines of reasoning that mostly justify how:</p> <ul style="list-style-type: none"> the recommended solution meets the needs of the client and users potential risks will be mitigated the proposed solution will address relevant regulatory guidelines and legal requirements, in relation to software development and the industry. 	<p>The proposal provides comprehensive lines of reasoning that fully justify how the:</p> <ul style="list-style-type: none"> the recommended solution meets the needs of the client and users potential risks will be mitigated the proposed solution will address relevant regulatory guidelines and legal requirements, in relation to software development and the industry.
Appreciation of the business context		<p>The proposal provides basic definitions of:</p> <ul style="list-style-type: none"> functional and non-functional requirements key performance indicators user acceptance criteria 	<p>The proposal provides good definitions of:</p> <ul style="list-style-type: none"> functional and non-functional requirements key performance indicators user acceptance criteria 	<p>The proposal provides comprehensive and perceptive definitions of:</p> <ul style="list-style-type: none"> functional and non-functional requirements key performance indicators user acceptance criteria

Indicative content and marker guidance
<p>The design should provide details of the solution that is to be implemented by the student. The designs should be usable by third party to implement the intended solution.</p> <ul style="list-style-type: none"> layout and white space may include: <ul style="list-style-type: none"> clear 'zones' which allow user to focus on specific content Space between lines to aid readability. related information is close together but do not encroach on each other sensible breaks/separation of information to avoid overload details of reactive layouts to suit different screens/devices (e.g. mobile and desktop version) visual hierarchies may include: <ul style="list-style-type: none"> Sensible and appropriate use of sizing if information/items to help optimize user information Order of design elements (e.g. orders in navbars and menus) to signify significance or 'route' through information common conventions include: <ul style="list-style-type: none"> Include details of common design features which may include (but not limited to): <ul style="list-style-type: none"> Common/recognizable icons (e.g. house = home) Placement of navigation item (top or left) Use of 'hamburger' button/collapsible menus for mobile layout. <p>General 'good' design features to consider:</p> <ul style="list-style-type: none"> Clear branding Aesthetic and minimalist design Help and documentation Feedback- give good error messages, actions need reactions- things to consider error prevention, auto detection of errors, clear error notification and possible hints solving problems Use of imagery and other media to aid accessibility and understanding. Avoiding inclusion of information which is irrelevant or rarely needed. Ensuring good user experience through appropriate content and design. <p>Contextual considerations may include:</p> <ul style="list-style-type: none"> Booking form for hotel/tickets Educational resources/quizzes Use of text, images, maps, graphs etc to make as appropriate to make information more accessible and relevant (e.g. map of the zoo, pictures of the rooms)

Assessment focus	Band 0	Band 1	Band 2	Band 3
	0	1-2	3-4	5-6
Effectiveness of the design interface	No rewardable material	<p>The proposed design interface is adequate as a result of reasonably effective use of:</p> <ul style="list-style-type: none"> layout and white space visual hierarchies common conventions. 	<p>The proposed design interface is good as a result of the effective use of:</p> <ul style="list-style-type: none"> layout and white space visual hierarchies common conventions. 	<p>The proposed design interface is excellent as a result of the sophisticated and highly effective use of:</p> <ul style="list-style-type: none"> layout and white space visual hierarchies common conventions.