Tokka Fitness Proposal

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# Introduction

*background about the client and the project*

*target audience of the solution*

ToKa Fitness is a business that provides its customers with training sessions, fitness training and advice. They also offer premium content to their customers and many services that are to do with fitness. They specialise in creating an informative outlook to people all to do with the fitness industry.

I was tasked to create a digital solution for them with a purpose of increasing customer engagement, provide access to digital content and tailor newer customers to additional services offered by ToKa Fitness. Information on fitness and lifestyle is also a requirement for this solution. They already offer personal training sessions and advice but would like a digital solution with access to live resources on information to do with fitness.

# Proposed Solution

What solution are you proposing to the client?

Describe your solution

What pages will you include? What are the functions/features of each page?

The solution that I am here to propose for ToKa fitness is a web-based application in the form of a website. My reasoning for this is due to many factors. Websites have a huge flexibility factor since websites can be accessed on multiple devices such as mobile phones to computers and tablets so no matter what digital device clients use, they will be able to access the solution in whole. This is because of the fact websites are accessed on the internet as URL resources so anybody who can access the internet can access the solution. Another factor for flexibility is the use of multiple sources of media on a single website. HTML can support audio files, videos, text and attach extra links to things such as social media for ToKa fitness. This flexibility provides undeniable utility of the use of a website.

The website itself that I am creating will use HTML, CSS, JavScript, MYSQL to handle and store user data and node and express to run the server locally. This means that the server can then be ran by ToKa fitness on any scalable solution they may choose to use when the final version is done. My website solution will include static page files that will be rendered via ejs. These pages will include up to date styling and formatting using CSS flexbox and grid. The website will feature a dynamic navbar that will be able to be scaled to different devices so that mobile phones can also access the solution to a suitable and readable degree. The navbar will feature links to each different page via hrefs so it will be instant. There will be content sections on each page sectioned with headings and paragraph elements in different boxes. This approach will make sure content is aligned properly to be readable in a suitable way while also using contrasting colour schemes for the website and fonts to ensure anyone can understand what is on the website. The content of the website will reflect what ToKa fitness has asked me to include which I will speak about below.

Decomposition of client requirements

take each requirement at a time and decompose how your solution will address it

For higher marks you could add decomposition diagrams with your written explanations

provide information and advice about fitness training and healthy living –

I will be able fulfil this requirement

One of the client requirements is to provide information and advice about fitness training and healthy living. This will allow users to discover advice based on whatever they would like to see such as cardio or weight training. I can handle this requirement by listing a page with a selection of different sections for advice about fitness. There will be cardio, and strength and they will also find various exterior sources for additional help. There will also be a section in this advice page to check out healthy lifestyle tips and what foods to avoid or look for depending on their training goals. Again, there will be exterior sources on what to look for.

Another client requirement is access to digital content. This is to help customers with their training and how to do certain exercises. To fulfil this requirement, I can include video content on the advice page for customers to gain additional advice in a dedicated section. For example, the customer wants to know the form of lifting weights, there will be a video for this.

Another requirement is encouragement of use of ToKa fitness’ additional services. This can help gain attraction to other things the company has to offer. Social media links can be included in the footer to encourage users on the website to check them. Links to ToKa Fitness’ personal training sessions or a dedicated page talking for booking sessions will help with ToKa fitness’ existing personal sessions

Another requirement is accessibility features for users with visual impairments or speak different languages for example. Screen readers too. I can use alt tags to allow screen reading of images / videos. A dark mode toggle can also help those who would like an alternate mode to see better. Many websites like JEFIT use dark mode toggles for more accessibility. A language selector can also be accessed Aswell. I will include accessibility features next to the navbar for easier navigation and access.

Another requirement is a personalised tracker for workouts and health tracking. This is so users can have a personal tool to aid them just that bit more in their workouts. A separate web page will be designed with tracking in mind allowing users to track their calorie goal, output and what nutrients they need such as proteins. JEFIT allows a workout builder and tracker for nutrition and calories for users to customise and use.

Social features are another requirement which also can be having the media icons to get involved with ToKa fitness. However, a forum can also be included. This can give customers the ability to personally ask ToKa fitness questions and increase engagement making it a social opportunity to meet this requirement. The forum can also be included in the footer with the social media icons to section them together for easy access.

Justification – how does solution meet requirements

Take each requirement and fully justify how your solution meets these requirements

The website that I am building will have the capability to meet all requirements.

Firstly, the navbar will have a link specifically titled advice which will open a page full of sub links for weight training, cardio etc. in another small menu nav bar. They can select cardio, for example, and will be able to preview a heading of an overview of how to train for cardio during bulks and cuts. There will also be recommended diet and foods that will help with their desired cardio in paragraph elements on the left sight aligned to the left for readability. This will be ample enough to tick off the requirement for advice. However, I would also like to add the digital content section on this web page. There will be videos on the right-hand side stored as html video links. They will be different depending on the chosen section and will be various including how to work each muscle group. This way digital content will be able to be accessed directly on the website for additional information and guidance.

Another requirement was to provide access to ToKa’s additional services. As I have said, I will include social media links in a footer at the bottom of each web page. This footer will have cookie policies, acceptable use and privacy policy but will also include icons for social media. I can get these from W3Schools which provides them as copy paste links. Href’s to ToKa Fitness’ social media pages such as Instagram or Facebook. This will tick off this requirement. However, I additionally want to include the booking system that ToKa Fitness uses and put it inside the website. This way anyone who can access the website will be able to book a training session via another page listed in the main navbar in the header of the website. This will provide instant access to this and ToKa will be able to link a paywall in the final solution as I will build the entire system itself. This provides direct access to the training sessions they provide further ticking this requirement off. The social media icons can also link to social features as it is directly bringing in attraction to the social pages of ToKa fitness.

Next is accessibility. I will firstly broadly make my website accessible to most. This can be done by making sure there is ample colour contrast between the text and website design itself. I will use bright colours for the text such as white paired with a darker grey colour scheme with yellow accents away from the text. This will ensure proper readability for most users for this website. However, there will need to be additional settings. I will include the dark mode toggle at the top of the website which can be clicked anytime in the header to make the entire website dark for night time or those with visual needs. I will do this by adding an event listener to a button in JavaScript which will toggle a class of “dark” for all tags in the website. I will also include alt tags for images and especially the digital videos for those require screen reading. This will ensure that video content can easily be digested in word / screen reader format. With these, the website will be incredibly accessible.

The personalised tracker will have a separate link on the main navbar. Users will be able to access this page and a form will appear for them to input their workout details. They will be able to enter the calories burnt, the type of workout from a pre-determined list using the select element in the form. They will then be able to submit this data and it will be sent into the database linked to the user’s id. They will then be able to access all of their workouts just under the tracker via a history list showing what they worked and when. They can remove these too if they were not desired. This will ensure that this requirement is properly ticked off.

# Risk Mitigation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Risk | Impact | Mitigation | New Impact | Other |
| Malicious/inappropriate use of the website by hacker - we could have a hacker posing as a user to register and login to the website or create lots of fake accounts to access the website and gain unauthorised access | HIGH | To reduce the impact of this risk we ensure that all input to the website is validated. The registration page and login page will have validation features such as presence checks and format checks to ensure that data is valid and formatted correctly for the website. User accounts will be checked by authenticating them and verifying them with a valid email address. | MEDIUM | Project Manager |
| Intercepting data / man in the middle attacks – Hackers could intercept the firewall and sabotage data inputs between the user and the website for example their personal meal or activity data. | HIGH | To reduce the likelihood of this, the database itself containing the user’s details must be secure and not be able to be accessed easily by third parties. We can use XAMPP and host it on a server only we have access to the data on it to be secured. All data transfers between users and the website must be encrypted to ensure any third parties cannot access the contents of it. We can use encryption keys that can only be decrypted by those who have access to the database. | MEDIUM | Project Manager |
| SQL injection – User data in our database is at risk from SQL query manipulations to inject malicious code. Entries in our database can be modified and authentication can also be bypassed due to user credentials being stored here. | HIGH | To mitigate this risk, we can keep the frameworks and libraries up to date so older versions cannot be exploited. Making sure error messages are not too detailed which can reveal structure in the database are not used and more simple errors are used instead such as ‘Access denied’. | MEDIUM | Project Manager |

# Regulatory requirements and guidelines

In developing this solution, there will be quite a lot of digital legislations and web development specific guidelines to adhere to for ToKa Fitness to launch a perfect and fair platform for everyone to use. This will include the GDPR, W3C and the Copyright and Patents act. Toka Fitness will also be including purchases and paid content so must also adhere to the Consumer Protect from Unfair Trading Regulations 2008.

GDPR – GDPR (General Data Protection Regulation) is a regulation that has been put in place for the whole of the EU to follow. It lists guidelines and rules on how organisations may manipulate customer and client data. It protects the privacy of users and gives them control on how their data will be used. There are many principles that ToKa fitness will need to adhere to. Lawfulness and transparency, Purpose limitation, data minimisation, data accuracy, storage limitation and integrity and confidentiality. ToKa fitness will need to ensure that any personal data such as what workouts people are doing, or their login details is transparent which means they must notify the users in detail of how it is being used in a privacy policy. Data must only also be used for the specified purposes and nothing else to ensure fair treatment and agreement between clients and the company. Data should also be accurate and up to date which means they cannot be changed and manipulated by the organisation. Only by the user. Data should also be kept confidential so no third party can access it so security and authentication are a must.

W3C: An international organisation that develops open standards for web content. The purpose is to make web content accessible to all. ToKa fitness will need to ensure that the website has sufficient accessibility such as dark mode toggle for people with visual impairments, text alternatives to videos and images using alt tags for example and clear navigation to make the site easy to navigate such as big headers separating paragraphs. Text should also be consistently aligned to avoid difficulty in reading.

Consumer Protection from Unfair Trading Regulations 2008 – This act protects consumers by ensuring fairness in trades. This includes digitally. Since ToKa fitness will have some features behind paywalls like the meal planner, they will have to make sure purchases are fair to their price and that transactions are secure.

Functional requirements:

|  |  |  |
| --- | --- | --- |
| Requirement | Priority | Justification |
| The system will allow the user to register for a new account | HIGH | The system must allow users to be able to have their own accounts to track their own activity to ensure that personal activities will be tracked sufficiently. Also adds a security factor to protect individual users’ data. |
| Third-Party fitness apps integration | LOW | Not required but will be useful later on to be integrated with other apps such as MyFitnessPal so that the solution can be used on the go which adds more utility and flexibility. |
| Provide advice per training type | HIGH | The system must provide advice on different training methods and include food and diet plans for bulks and cuts. This is to provide as much information as possible to the user. |
| Workout Tracker | HIGH | A main requirement for the system. Users should be able to track and add workouts at will. |
| Paid Content | HIGH | Another main requirement. The system must have room for paid content which will be the meal planner. |
| Security | HIGH | The system must be secure with valid encryption and validation used for logging in and storing user details. |
| Logout and keeping user signed in | MEDIUM | Not a necessity but should give users that control over how long they are logged in for. |
| Customer questions and support | MEDIUM | Not a necessity but including a form in the footer will increase customer engagement and intractability. System can also be improved with feedback. |
| Video content | HIGH | A main requirement. Video content on the website will give users access to better advice from content on exercise form for example. |

Non-Functional Requirements:

|  |  |  |
| --- | --- | --- |
| Requirement | Priority | Justification |
| Gray primary colour | HIGH | Having a darker primary colour will ensure text is readable and the entire layout is clean. |
| Dark mode toggle | HIGH | Dark mode toggle will ensure visual clarity at night or for those with visual impairments. |
| The System must be responsive below 760px | HIGH | Ensuring that the system is responsive will allow it to be accessed on multiple devices making it accessible. |
| The header must be consistent on every page with links to every page | HIGH | Consistent headers will allow access to all pages anytime making the solution accessible. |
| Scalability | HIGH | The future of the system must handle newer features overtime. Ensuring scalability can keep the system consistent for the future and ever-changing environment. Ensuring scalability can keep ToKa fitness ahead of its competitors. |
| The system should load quickly and be up 99% of the time | HIGH | Ensuring fast performance can make sure the website can be accessed without issues. Will also keep clients happy. Keeping less downtime will also keep it consistent. |
| Version Control | HIGH | Healthy version control that does not break the system can ensure smooth rollout of new features later on |
| Multi browser compatibility | HIGH | The system should be compatible on multiple browsers so that user preferred browsers can be used with this system and they would not be forced to change. |
| Multi language selection toggle | HIGH | The accessibility requirement could also use a language toggle. This will ensure people with language barriers can still access the solution. |

# KPI’s

KPI’s will indicate some goals for the solution on its launch. This will ensure healthy improvements of the solution in case these KPI’s are not met and will allow the solution to continuously expand with more goals in the future. These are just beginning goals that the solution must meet.

The website should have a minimum of 5000 users within the first two months of launch

The website should retain at least 70% of launch users after the 2nd month.

At least 1000 users will have tracked 30 days of workouts within the first 2 months.

The website will resolve 90% of user complaints within the first month.

The website will have scheduled downtime only once a month giving notifications to users in advance

The website will have at least 60% of users access the paid content 2 months after launch.

The website will have an average user duration of 10 minutes within the first 2 months.

The website will receive double the number of users in visits.

The website will have a minimum response time of 3 seconds.

# User Acceptance Criteria:

|  |  |  |  |
| --- | --- | --- | --- |
| User | Action | Goal | UAC |
| Customer | I would like to have a dark mode toggle in the website | This is so the website will be easier on my eyes at night time. | The website must have a dark mode toggle available in an easy to find location. |
| Customer | I would like to be able to track my previous workouts | This is so I can count the calories I burnt in total for that week | The website will display previously done workouts tracked by date in another section |
| Customer | I would like to be able to plan meals | This is so I can plan the amount of calories in every meal | The website will have a meal planner in the tracker page to plan meals. |
| Customer | I would like a language toggle | This is so I can read the contents of the advice easier as English is not my main language | The website will include a language toggle in the accessibility settings tab to select any language. |
| Customer | I would like to access advice for weight training with form for different exercises | I recently started training so I would like additional advice on how to perform certain exercises | The website will include thorough advice for weight training and include videos that demonstrate form on the right side of the advice page for different muscle groups. |
| Customer | I would like to be able to book a session with ToKa fitness. | This is because I have heard of their session training and would like to access this on the website | The website will have a booking system for people to book a session with ToKa Fitness |
| Customer | I would like to submit a question to ToKa Fitness regarding the website | There is no guidance on the issue I am having so I would like to submit my question. | The website will have a form in the footer to allow users to submit any feedback they have. |
| Customer | I would like to access ToKa Fitness’ Instagram page | I heard I could get involved with community events with them on their Instagram page so I would like to access it | The website will have social media links in the footer. |
| Admin | I would like to add a new language to the language selection list | There are some languages that we do not currently support | The website will have the ability for admins to add onto the array of listed languages for scalability. |
| Admin | I would like to be able to access the user database | A user has changed their email and cannot access the one that they registered with. | The solution will allow those authorised to view and edit the database using phpMyAdmin authorisation with a password. |
| Admin | I would like to add more benefits to the paid content. | Some users have requested more features in the meal planner | The solution will allow admins to add more features to the paid meal planner. |

# Summary

This proposal gives a rough summary of what I will develop and what things will be considered. The focus of the solution is to attempt to meet the client requirements as accurately as possible to ensure that the solution is up to the standard that ToKa Fitness has expected. Risks will also be a main factor to be considered so I will also ensure security and robustness of the solution via its code and structure. Thorough testing will be conducted before the solution is live via testing in the test strategy I have created. Thank you for reading this proposal and hopefully I have given suitable reasoning as to why a web based application will be the best step for this solution moving forward.