# INFS3202: PROJECT PROPOSAL

# FIT2LEARN

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## Introduction

Are you struggling to learn how to exercise? Are you exhausted of researching through the web and social media, trying to find a reliable and easy to you source of fitness and nutrition information? Look no further, this project will develop an intuitive to use and engaging fitness-based educational website. Beginners are usually anxious about starting their fitness journey and either lean towards expensive gym programs or watching low quality videos on YouTube that can cause more harm than benefit. Fit2Learn aims to solve this issue and will enable people to form communities of like-minded individuals who are committed to living their best lives.

## Objectives

Model-View-Controller (MVC) will be the backbone of Fit2Learn over other architectures because it is easy to separate application components, which allows for easier maintenance and testing of the website. The website will allow content creators and instructors to upload their own courses for learners to view, purchase and download content. The courses will be highly customisable by the creator to enable more enjoyable content such as adding tags and descriptions. Fit2Learn will generate closed caption for uploaded videos via voice recognition to help with learnability and will feature a search functionality to allow user to find what courses they are interested in.

One key feature of the website will be the ability for users to create profiles and personalise their account to track their fitness goals and favourite workout. Fit2learn will allow learners to like, rate and comment on courses and subscribe to their favourite fitness instructors. Additionally, to further foster a tighter and active community, users may add their favourite courses to their wish list or collection and share videos and courses with others. A notification mechanism is essential so learners can be sent invoices for their purchases, and to notify when their favourite instructors release more content. Fit2Learn core features will include server-side login validation, registration, and user profiles. Cookies will be used to store insensitive data that are used to identify computer specific details like retaining form data or usernames. The use of AJAX will enable the validation of form inputs in real-time and continuous scroll. Cybersecurity is the upmost important so Fit2Learn will use secure multi-factor authentication (MFA) and password policies to help prevent unauthorised access. Additionally, email addresses will be verified to deter identify theft and promote users that are real people. Passwords and payment details will be hashed to protect in the case of a security breach. For front-end tools, the website will primarily use HTML, CSS and JavaScript as the foundation and use libraries Bootstrap and jQuery. For backend, CodeIgniter will be used as it is a lightweight PHP web framework that follows the MVC architecture and provides a simple way to develop a web program and manipulate information from a database. As scalability is not an important focus of this small website, MySQL which is a relatively easy to use relational database, has been chosen to store all the content and data of Fit2Learn. The whole application will be deployed on UQZone as it is provided free to use. NoSQL databases and cloud solution may be used instead if the project requirements change and it is determined to be more feasibility.

## UI/UX Design

Fit2Learn will follow standard website design patterns for intuitiveness and ease of use. This includes using conventional icons will be used such as ‘hamburger’ icon for expand and ‘magnifying glass’ for search. All the core pages and functionality of the website will be reachable from the top navigation bar. Hovering over the heading buttons in the nav bar will display more related options and clicking on the menu will display lesser used pages such as settings.

A site map has been created to help illustrate the linking between the pages of the website.

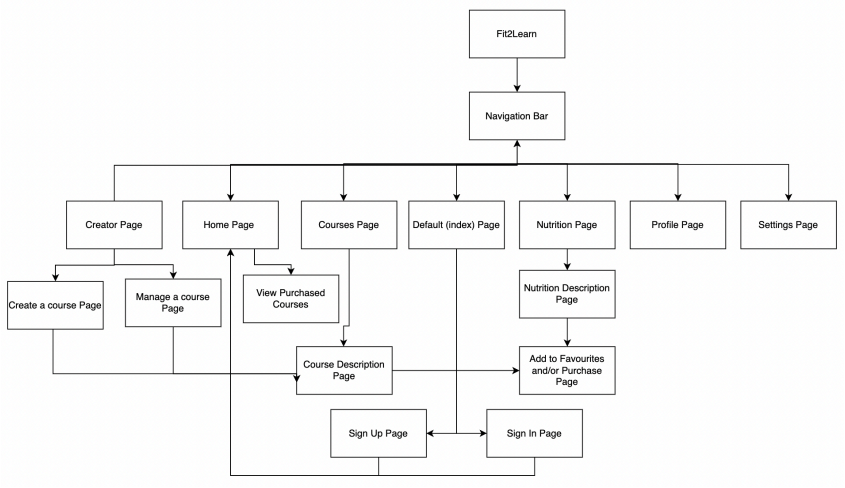



*Table 1: Site Map showing links between pages*

The main page, default (index) page and the courses pages are illustrated as wireframes. The default page is for users when they load the website and features the call to action and allows users to register or sign in. The main page is the primary home page and houses details about the user's performance and suggestions for activities to complete. The courses page allows users to browse and click on all the courses offered. These prototypes represent a small fraction of the core functionality of the webpage and gives a visual indication of the final implementation. Refer to the appendix for larger view of the diagrams.

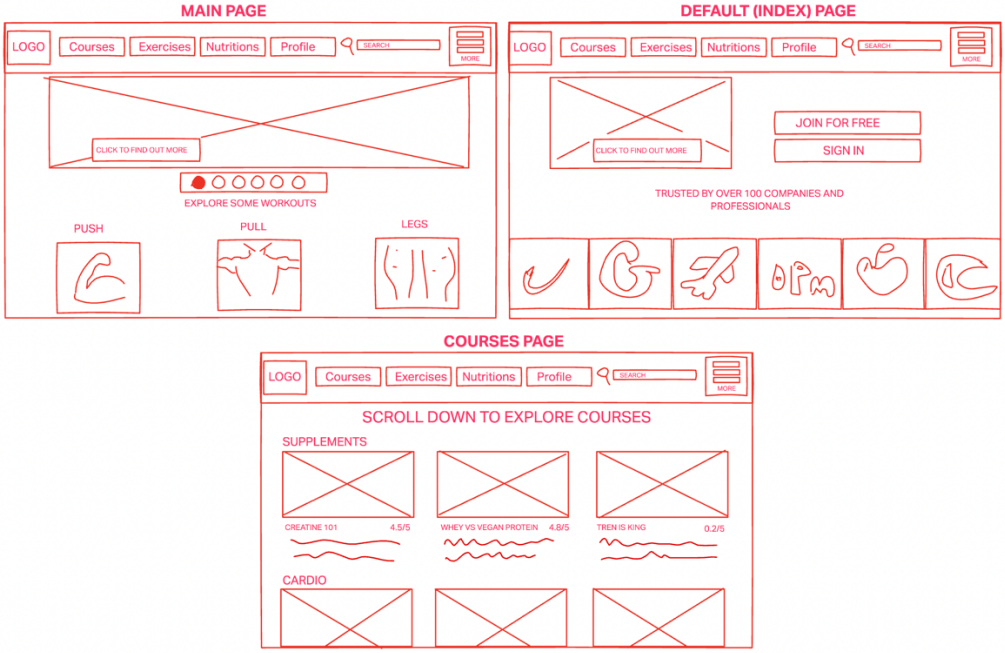



*Table 2: Wireframe of main page, default (index) page and courses page.*

## Timeline

Refer to appendix for specification of the features.

| Features | Week 5 | Week 6 | Week 7 | Mid Sem Break | Week 8 | Week 9 | Week 10 (milestone 2 due) | Week 11 | Week 12 | Week 13 (milestone 3 due) |
|---|---|---|---|---|---|---|---|---|---|---|
| **Core** | 1,2,3,4,5 | | | | | | | | | |
| **Basic** | | 6,7 | 8,9 | 10,11,12 | 13, 14 | 15,16,17 | 18,19 | | | 20 |
| **Intermediate** | | | | | | 22 | | 21, 23, 24 | | |
| **Custom** | | | | | | | | | 25 | |
| **Cumulative Point** | 0 | 4 | 8 | 14 | 18 | 27 | 31 | 39 | 39 | 42 |

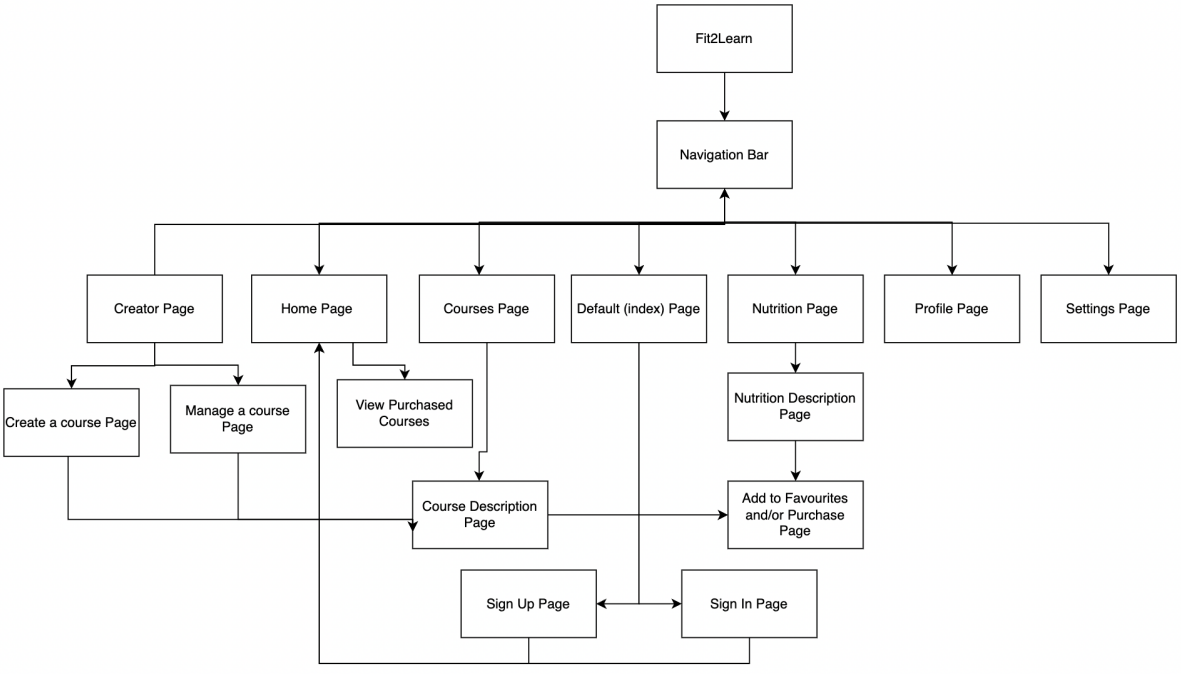
*Table 3: Timetable*

# Appendix

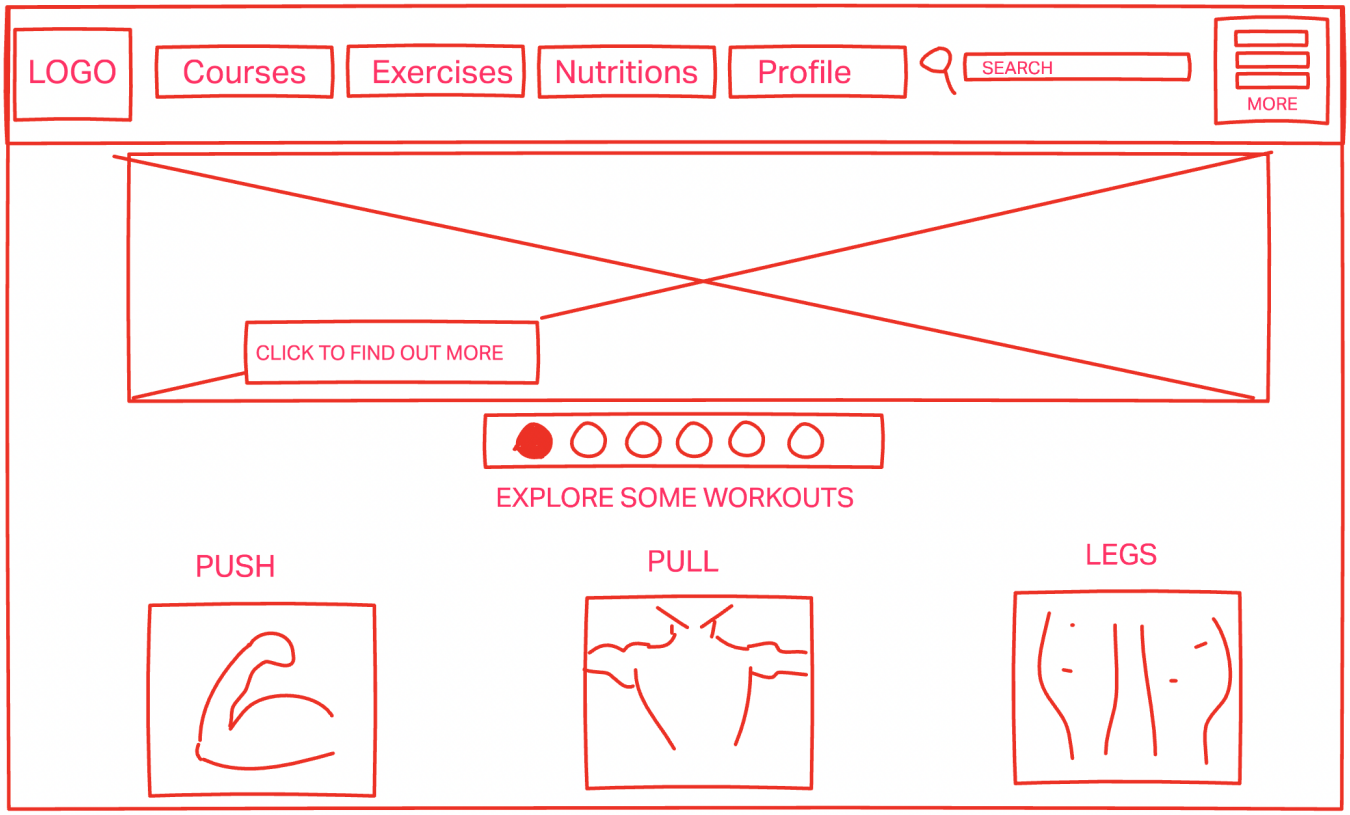
## FEATURES LIST

| # | Index | Difficulty | Cumulative Points |
|---|---|---|---|
| **1** | Login | Core | 0 |
| **2** | Registration | Core | 0 |
| **3** | User Profile | Core | 0 |
| **4** | Cookies | Core | 0 |
| **5** | Ajax | Core | 0 |
| **6** | Remember me | Basic | 2 |
| **7** | Maintain scroll position | Basic | 4 |
| **8** | Continuously loading data when scrolling | Basic | 6 |
| **9** | Favourites or rating | Basic | 8 |
| **10** | Search boxes autocomplete | Basic | 10 |
| **11** | Adding courses | Basic | 12 |
| **12** | Writing comments/reviews | Basic | 14 |
| **13** | User profile updating | Basic | 16 |
| **14** | Image processing | Basic | 18 |
| **15** | Third-party API integration | Basic | 20 |
| **16** | Basic file uploading | Basic | 22 |
| **17** | Using drag and drop to choose file for uploading | Basic | 24 |
| **18** | Multiples files uploading at the same time | Basic | 26 |
| **19** | Web security (captcha, password encryption) | Basic | 28 |
| **20** | online payment integration | Basic | 30 |
| **21** | Image and PDF manipulation (sending receipt) | Basic | 32 |
| **22** | Item searching | Intermediate | 35 |
| **23** | Email verification | Intermediate | 38 |
| **24** | Forgot password | Intermediate | 41 |
| **25** | Closed captioning generation on video | Custom | |

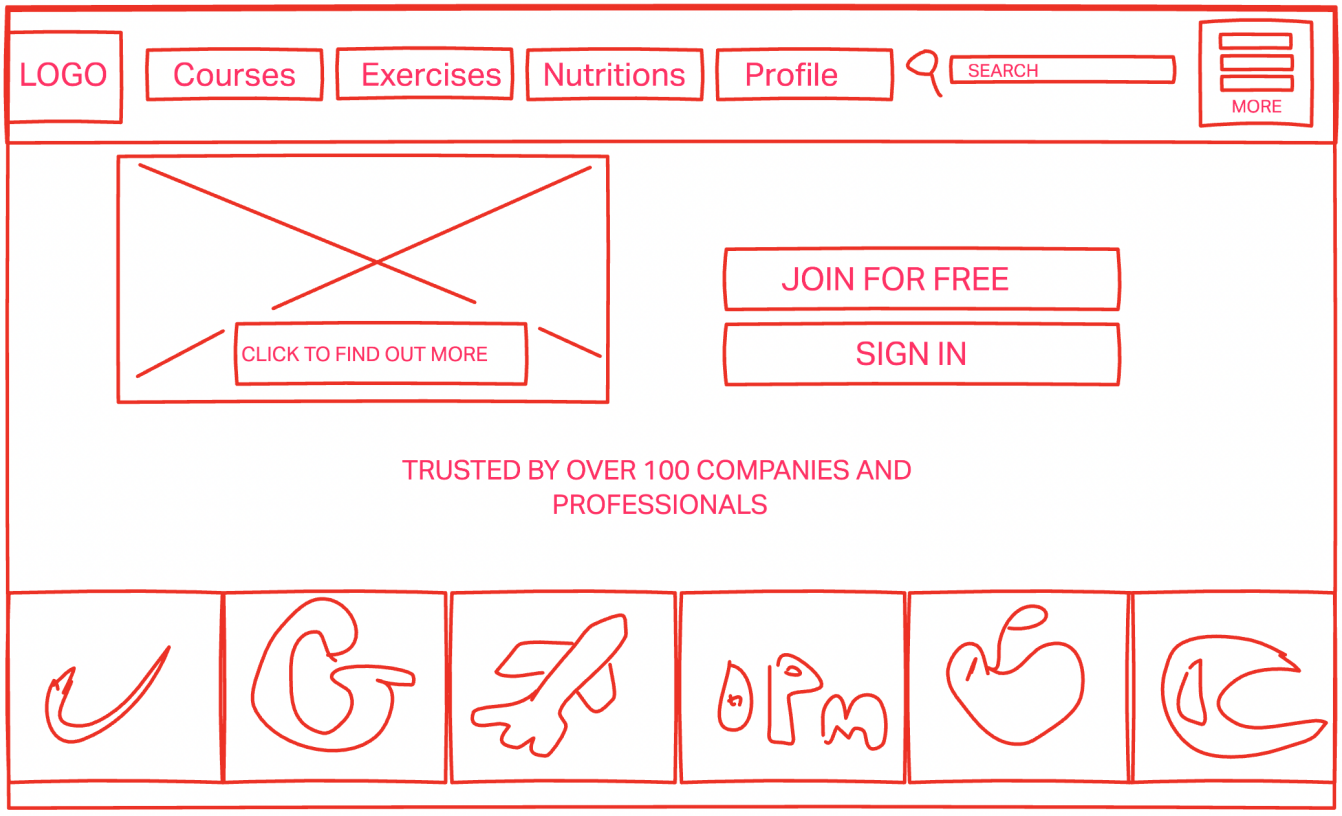
## SITE PAGE



## HOME PAGE




## SIGN UP PAGE



COURSES PAGE