

Hello, we are looking for a reliable tech partner for an **EdTech startup** based in Bangalore.

The objective of the project is to develop a healthcare cum law application (iOS+ Android), where medical + law students can sign up into the application and they can perform learning activities by using the Question, image bank, interactive video lesson and they can take the test promptly.

The application will have the following features

Marrow as a reference app (marrow.com)

Security Protocols

In the application there will be some security modules to secure our data within the app like:-

- Users won't be able to take a screenshot of the working application for security purposes.
- Not more than two videos (we can decide the number of videos during the development phase) could be downloaded per user.
- Through one user id, the application can be accessed on only two registered devices.
- **Application (Android + iOS) will run on mobile devices and tablets. (NOT ON LAPTOP)**
- A watermark line or copyright will be displayed when the video lecture or tutorial is played.

Advanced security measures

- Screenshots prevention. (screenshots and screen recordings can be prevented to root level by using advanced boot level java code)
- **Application Access - Mobile Phones and Tablet - VIDEOS SHOULD NOT WORK ON LAPTOP**
- Screen recording prevention.
- Encrypted storage. (this is optional but it adds additional security we can opt for third-party platforms for this or you can develop from scratch. Some third-party platforms
<https://www.vdocipher.com/>
<https://wistia.com/>
<https://www.brightcove.com/en/online-video-platform>
- Encrypted streaming.
- Flag system. (it is a system by which we can block users who violate your system.)
- Ip monitoring.

- Rooted device security.
- Advance boot level screenshot prevention.
- Encrypted key management with one student one key system.
- Students' name/IP watermark.
- Advanced login system.

Type Of Users:

1. Customer
2. Admin

Feature list for eLearning application

1. Sign up

- Option to select academic year during signup
- State Selection
- Medical colleges list
- Submit

2. Login

- Through Email
- Through Mobile Number via OTP verification. (Using Twilio API Integration)
- Through Face book.

The user has to register in the application by filling all the necessary details.

1. Users can sign up via facebook or email id.
2. The user has to enter the full name, select the academic year such as MBBS first year, second year, third, final year student, internship and doctor.

3. The user has to choose the state of the college which he or she belongs to such as Andhra Pradesh, Assam, Bihar, Delhi, Gujarat.

4. User has to choose the college from the list or via search from the names of the colleges.

Dashboard

In this section, users will see the entire menu such as:-

1. Know More
2. Subscribe
3. Our Notes
4. FAQ
5. Rate Us
6. Share the app
7. About Us
8. Contact Us
9. Report Video Privacy
10. Terms and conditions

The entire menus are given so that the user can access them for the ease accessibility of the application. Also, it will display how many modules have been completed along with the featured discussion, MCQ of the day, suggested a test, suggested Qbank modules, suggested Videos, updates, and Treasures.

3. Question banks

- Bookmarked modules
- Custom module like hard, easy, medium and all
- List of question papers as All
- Paused question list
- Completed
- Un-attempted
- Free

In this section, the user can access the different subjects MCQs (Multiple Choice Questions) to solve them along with the correct and descriptive answer. It has filter options such as all, paused, completed, unattempted and free.

It has two additional features bookmarks the question and customizing the module section. In the Custom Module, it will show the number of questions, difficulty level, question from all Q bank MCQs, Bookmarked Q banks MCQs. Select the subjects options would be there, select the tags.

Lastly, two exam modes will exist such as Exam mode and regular mode. Later on, the user can give or solve the MCQs as per his or her customized modules.

3.1. Category list

In this section, it will consist of all the category listings such as subcategories and sub-subcategories. Category list could be

3.2. Subject list

In this section, it will show all the listing of the subjects such as

1. Anatomy
2. Biochemistry
3. Physiology
4. Pharmacology
5. Microbiology
6. Pathology
7. Community Medicine
8. Forensic Medicine
9. Ophthalmology
10. Anesthesia
11. Radiology
12. Surgery

All the listing of the subjects would be classified with the subject names.

3.3. Questionnaire module

In this section, all the questions of several subjects or courses would be displayed which are distinguished as separate modules.

3.4. Questionnaire review

In the questionnaire review section, the user can review or revise the question which has been asked so that the user can perform well in the test. This section can be accessed by the user when he or she has answered the question. Descriptive details of the answer would be shown at the same time so that the user can understand the question and answer very well.

3.5. System Bookmarks

In the system bookmarks, the user can bookmark the MCQs Question Bank, Videos Tutorials for the easy and later use.

3.6. Custom Questionnaire

In the custom questionnaire, the user can customize the question of different subjects as per the user requirement. Extra quality of life features - Copy someone else's Playlist (and modify it to fit your needs) + See the author and follower count on each Playlist + Track your progress in a Playlist via a new icon + View your own Playlists on MedTech Mobile.

3.7. Treasure Images modules video sessions test series profile

In this section, the user would be able to watch the videos tutorial of the different subjects which are explained by the highly qualified faculty of the particular subject. Also, it will have the option to download the video tutorials offline.

4. Course Details:

- On this page, the user can see the full details of the courses.
- Users can see the full description of the course, videos, and documents.
- If users wish to join the course, they need to click the "buy now" button at the top of the page.

4.1. Payment mode - Payment Testing

In the sections, all the subscription items would be shown such as plan A, plan B and plan C has to be purchased so that users can subscribe for the test series.

4.2. Payment Methods

Through these methods, the user can pay the amount to the admin for viewing or accessing the featured test series and paid video lectures.

There will be various payments method such as:

- Debit Card
- Credit Card
- UPI (Unified Payment Interface).

You will integrate one payment gateway based on our preference. This could be one among PayPal, Payza, Stripe, Paytm, Phone pay.

- Users can view the ratings and reviews about the course by clicking "Reviews and Rating" in the menu icon which is present in the top right corner of the page.
- Videos are playable only for the user who buys that course.
- Documents are downloadable only for the user who buy that course.

5. My Courses:

- On this page, the user views the list of courses which is all joined by the user with this app.
- It shows the name, image, desc, price, and status of the payment, etc.
- By clicking the course, the user can view the course details page to see videos and download documents if the status is finished. Otherwise, the user can't able to play the video and download the document.

6. Test series

- Paid
- Free
- Subject wise or concept-wise

7. Videos

- Paid
- Free
- Subject wise or concept-wise

8. Faculty list

9. Notes

10. Search Option

11. FAQs

12. Bookmark

13. Rating option

14. Share option

15. Contact option

Some more details :

Super Admin

Super Admin will have control of all the access that will be given in the application. Super Admin has more rights than the admin.

User Management

Users can manage all the content of the application.

Subscription Management

User will have the option to subscribe for the different subjects test series and need to subscribe to the test series by paying the plans amount to give the test which the user wants to give.

CMS for the Categories

User will have the option to update the content related to the categories of the MCQs uploaded. It is basically the content management system which will hold all the content of the application. Question (MCQ) , Video Lectures, tutorials upload and Management Questions will be uploaded along with the answer to each question. Also, the video lectures and tutorials would be uploaded with specific to the category of the subject. All uploading of the question in the question bank of the application along with the answer and video lectures, tutorials would be managed by the admin.

Subject Wise uploading and management

Subject wise questions and answers would be uploaded and managed by the admin. These question and answer would be subjected wise such as Biochemistry Anatomy, Physiology, Pharmacology, Microbiology, Pathology, and Community Medicine.

Courses Categories and management

Various categories of the courses would be uploaded with the faculty details teaching the particular course. Also, the time duration of the course would be shown with each course. It will consist of the course categories then it would be classified into the subcategories of those courses and also the sub-subcategories of the courses.

Paid and Free Questions MCQs and Video Lectures

Fee Questions and video lectures would be shown in the application which would be managed and uploaded by the admin. Moreover, the question and video lectures, tutorial which have to be set as paid version would be decided by the admin during the uploading of the question and video tutorials.

Static Website

You will create a one-page static website and it will consist of the option or icon to download the Android and iOS versions of the mobile application. Also, it would contain the content related to the application which would be displayed on the website.

Brief Summary

- Question-bank
- Imagebank
- Interactive video lesson
- Learning analysis
- Treasures
- Test series
- Custom module
- Subscription

Overview

Users can register into the application by providing the required information. If the user is already a member then they can log in to the application with their registered credentials. Once logged in the application will let users dashboard and users can upgrade their account by purchasing a plan. Upon selecting the upgrade button, the user will be navigated to the respected page, where they can view the available subscription package. Users can select the desired package. When the user selects the purchase button, the application will let the user to the payment gateway. Once the payment made successfully, the user will receive an Order confirmation screen.

Question bank

Upon selecting the Question bank, the user will be able to view a list of all chapters in a chronological manner. By clicking on any chapter, the user will be navigated to the subtopic listing page and let the user start the learning process. The application will display a set of questions on each subtopic. If a student failed to answer correctly, the application will display the correct answer along with a solution explanation. If students answer correctly, the application will let the student to the next question. Students can also bookmark Questions. Upon completing each practice, the student will be able to track and view their performance in the knowledge graph. Analysis and performance will have the following Display performance level, Accuracy level and Question answered.

Custom modules

Users can create a custom MCQ module by selecting the difficulty level, length, and subject of their choice. Custom Playlists = video+ add any Learn Page to your playlist, including: Anatomy pages, Pages with MedTech High-Yield Notes, Pages that include flashcards and questions. What MedTech learners will say about Custom Playlists? "I'm making playlists for each of my clinical rotations like Women's Health, Pediatrics, etc. I add videos based on clinical presentations I see, or content I know I'll need to cover. Playlists made MedTech a way more effective learning tool for me!" - Suresh A, PA-2, AIIMS New Delhi.

Treasures

Users can view a list of topics with explanations in the Treasure. The application will have filter by feature so that the user will be able to find sub-topics easily. The application will also user to bookmark the desired sub-topic.

Image bank

Image bank will have collection images for each chapter, where the user will be able to view the image and parts name for each chapter. The application will also let the user filter and bookmark the desired image. Users can find video lectures for each chapter on the video page.

Test series

When the user selects the test, the user will be able to view the list of tests and let the user take the desired test. Upon selecting the take test, the application will display instructions to the user. The test page will have multiple choice questions and periods. A student has to complete the test within the time slot. Once the user submits the test, the system will display a confirmation screen. Users can also view solutions for the prior test by selecting the solution.

My Account

My account screen will let the user view and edit their profile. In this screen, the user will be able to change their password and change their email addresses. Also, my account screen will allow the user to manage the following features Account information, Subscription

Admin

- Admin will login to the application with their credentials. Once admin logged in to the account they will be redirected to the dashboard. The dashboard allows the admin to manage the following features.
- Statistics and analytics
- User management
- Subscription management
- Manage CMS
- Manage Categories
- Manage Questionnaires
- Manage Treasures
- Manage Images
- Manage Video Session
- Manage Test series

Resource Plan

- Project Manager
- Technical Lead/Architect
- Designers - Ui & UX
- Developers,
- Test Engineers

Technology Stack

BEST COMBINATION WITH CLEAR PROS AND CONS

UI & UX (convert PSD etc into App screens with pixel perfect and keeping it optimized and user-friendly)- Axure, PSD

Front end: HTML 5, CSS 3, JavaScript, Bootstrap, JQuery, Angular (Any other)

Backend (core of app development start coding and add features of the Application step by step. Navigational built, APIs Integration, Functionalities will be done in this Phase): PHP (Laravel), Node JS

Database : RDBMS(Mysql) & SQLite

Application: React Native or flutter

Framework: Python, React Native, .Net or Laravel PHP and for Mobile-React Native or Flutter(Latest Tech) (Any Other)

Programming Language: Python, React native (Any Other), SWIFT

Android App - React Native for Hybrid (Cross Platform), Java, DART

iOS App - Swift

IDE: Android Studio, Xcode, iOs (Any Other)

APIs: Payment Gateway, Twilio API, other APIs integration

Web Panel Development: Node JS or PHP

Server: AWS Preferred

Testing : Testing is vital. People rarely give an app a second chance. Test vigorously. Not just whether button 'A' does what button 'B' is supposed to but testing on other people. It's about making sure that everything works as it should and the flow of the APP occurs naturally to random people the first time they play with it.

Submitting to App stores : When you're ready and we're happy, we will submit it to the App Store. You will prepare all the marketing material needed like screenshots and descriptions for the listing. If there are any issues, you will refine them and re-submit until we get approval.

Summary :

Elearning app for Medical + Law students

- Registration based on users academic year
- Dedicated content for each year
- Ability for admin to add content for each specific year

- OTP verification
- 4 different sections in-app (home, question bank, test series and video)
- Homepage/dashboard to provide basic information to students regarding featured courses, MCQs, suggested test series, suggested test series, suggested videos, etc. [Dashboard](#) -
 - When watching MedTech videos, students can: Track thier recent searches + Find recently-watched Playlists + Pick up where you left off in a video + Enjoy a more convenient, Netflix-like experience as they learn.
- Dynamic content on homepage like Featured, live classes, and updates
- Question bank to provide all the available subjects Questions based on users selection on registration
- Filtration system on question bank to have specific questions
- Bookmark option
- Test series with all users rank and advanced insights
- Different test series categories
- Video classes with subject-based category
- Different plans to access different sections of the app (question bank, videos, test series)
- Admin will have the ability to create new plans and edit existing plans
- Static web-based pages like blog, t&c, about us, contact us. Etc
- Admin can add content for each specific year and modules
- Course selection on registration page(doctors, lawyers)
- Option for admin to create unlimited courses.
- Each course will have separate subcategory (academic year)
- Payment gateway integration.
- In-app notifications - Notifications updates {Notifications section (the bell icon in the upper-right) where we'll deliver MedTech news including giveaways to earn free swag, scholarship updates, and more. They should receive fewer in-app messages as a result!}
- admin can create module and make them available either free or for paid users live student module statues (completed, paused, unattempted)

Basic eLearning features

- Create and Sell Courses
- Create and upload custom badges and certificates
- Course Reviews & Ratings
- Search in Courses
- Select Instructor, Course Category or Course levels to search in
- Overall Course Stats
- Students Course Stats
- Course Result
- Auto Messages & Notifications
- Bulk Messaging
- Live status in Course Timeline
- Set Course Status, award marks for course
- Award Certificates, Badges
- Extend subscriptions
- Displays Courses reviews
- Displays course reviews in Single Items, lists, and Carousels
- Question Bank
- Auto Evaluation
- Quiz Timer
- Quiz Timeline
- Detailed Result

- Auto Messaging & Notifications
- Quiz Automatic/Manual Evaluation
- Quiz Stats, download student scores
- Dynamic Question, create quiz from a pool of questions
- Share / Print result
- Full Course Stats
- Quiz Stats
- Assignment Stats
- Student Wise Stats
- Overview: Total Students, instructors, courses, # students courses graphs
- Course-wise stats: Each Course with # students, Average marks, # badges, #certificates
- Instructor-wise stats: Each Instructor with # students, Average marks, # badges, #certificates
- Import & create Course, Quiz, Questions, Assignments
- Import & create Users
- Connect users with courses, quizzes, assignments with marks
- Overview: Total Students, instructors, courses, # students courses graphs
- Course-wise stats: Each Course with # students, Average marks, # badges, #certificates
- Instructor-wise stats: Each Instructor with # students, Average marks, # badges, #certificates
- Multiple Course in single product
- Enable/Disable Subscriptions
- Custom Subscription duration for each course
- Custom Header Login Panel
- Unique Layout

Pages/Screens: The website will have all the basic pages along with other necessary pages. Users will have the ability to create new pages from the CMS. Admin can create unlimited categories, sub-categories, subjects, classes, quizzes, etc

Images: Images will be supplied by us, as desired and appropriate, will be incorporated. Professional stock images may be used.

Design/Code: The site will have an attractive visual design, created with our feedback and to our satisfaction, and be easily navigable and usable. Code can be W3Cstandard, Bootstrap, HTML, PHP, JavaScript, CSS, etc and pages will be designed to display well on all major browsers at all common monitor resolutions.

Usability: Simplicity, cleanness of visual design, and ease of operation for the end-user will be high-priority considerations at each stage of the design process.

Web Hosting: Will be provided by you.

Domain Name: Will be provided by you.

Testing: Web site and app will be tested for compatibility with all common operating systems, browsers and monitor resolutions according to standard company policy.

Site Statistics: Detailed site statistics are provided by the web host, and should be easily accessible to us at any time.

Domain Email: Will be set by the admin