EINSTEINS ACADEMY

MOBILE APP

SOFTWARE PROJECT MANAGEMENT PLAN (SPMP)

Version 1.0
7th December, 2021

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1. Project Details

Client Information	
Project Name	Einsteins Academy
Client Name	Ziyaanah Ahmad
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Company Information	
Contact Person	Joe Carter
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APPSTIRR   www.appstirr.com

2. Objective

The objective of this document is to define the scope and features of the project which involves developing an Android and iOS mobile app. Einsteins Academy is a learning app, which is designed to help and engage the students in their academics and also encourage them to help each other by sharing the study materials such as student notes. This app will also allow the teachers to upload their teaching material such as teacher's notes, and past papers.

For the ease of students, this app will also contain a discussion board where they can share the problems and topics to discuss with other registered students in the app and also with the teachers. In this app students and teachers will be able to view live events and sessions which will be scheduled by any teacher or student, they will be able to invite other members of the app.

Users will also be able to join the live session and events even if they are not invited to that event, they will be able to send a request to join the event and the scheduler will have an access to accept the request and allow them to join the live session or event. Zoom meetings will be integrated for the live video calls. Students will also be able to view study material according to their grades/classes and according to their topics.

This app will also have a text to voice option where users will be able to listen to the uploaded content in the app, users will also be able to record audio of the text while listening in case the user wants to listen to the study material later.

3. Scope

The project scope has been prepared after gaining an understanding of the client's requirements. Features listed here (not explicitly requested by the client) are necessary to complete the project. The client may request additional features before accepting this Project Scope of Work as Conclusive. The entire implementation has been divided into multiple phases.

Platforms

- Mobile App – iOS and Android
- Web-based admin panel

Language

- English
- Arabic

4. Project Features

Following are the features for the Einsteins Academy and Admin Panel:

Application Features – Student

i. Sign up / Registration

- Once the app is launched, users who are logging in for the first time would be required to sign up and create an account. There will be two interfaces in this app and users will be able to:
  - o Sign up for Students
  - o Sign up for Teacher
- Users will be required to provide the following details to sign up on the application.
  - o First and Last Name
  - o Password
  - o Confirm Password
  - o Email Address
  - o Phone Number
  - o City/Country
  - o Grade
  - o Institute Name (Optional)
- Users will be able to able to select city and country name from the drop down pre-defined fields.
- User will enter these details and submit them. The next screen will show terms and conditions and users will be required to accept terms and conditions to proceed to the next screen.

ii.   Two-Factor Authentication

- After entering the registration details and accepting terms and conditions, the app will require users to verify their account through OTP.
- Users will receive an OTP code on their registered email ID for verification.
- Users will be required to type the OTP code on the verification screen and submit it to proceed to the next screen

iii.   Login

- Existing users can log in using their username and password.
- There will be a standard option of 'Remember Me' to save login credentials on the login screen.

iv.   Forget Password / Password Retrieval

There will be an option for password retrieval for users.

- Users will enter the email address they used for signing up with the app.
  - Tapping on '*Back*' button will navigate the user to the Login screen.
- User will get a 4-digit reset code on their Mobile Number or E-mail id to reset their account password.
  - Tapping on '*Back*' button will navigate the user to the enter email screen.
- Users will be able to type new password and press done to change password.
  - Tapping on '*Back*' button will navigate the user to the enter code screen.

v.   App Tutorial / Walkthrough

- A walkthrough is the process of intentionally revealing functionality to a user. Walkthrough is an increasingly popular user experience strategy as apps become more complex. It is a constant struggle to balance

functionality with ease of use, which is why walkthroughs are incredibly useful, especially when implemented with care and precision.

- On the first launch of the application, user will be presented with several screens with text and graphics that will allow a user to better know and understand the idea behind the app.
- Users can skip the screens by tapping the *Skip* button.

vi. Home

- After the login users will be enable to access the home screen.
- Users will be able to view the list of study material and notes available on the application.
- Each material will be shown to the registered users and by selecting the study materials users will be able to access and gain benefit from the uploaded materials for study purposes.

  The home screen will display the following features:

  - Study Material
  - Study Notes
  - Past Papers
  - Discussion Board
  - Event/Sessions

a. Study Material

The study material is one of the core feature in the app, where registered users will be able to access the study material uploaded by teachers for different grades/classes and for different topics. These materials will help students in their academics and other things related to academics. Study material in-app will be available in the following forms:

- Pdfs
- Audios
- Videos

Audio and video files will be played in audio and video player.

b. Students Notes

In the app registered students will be able to upload their notes, which will be easily accessible by the other registered students in the app to help each other in studying purposes. The student notes will be uploading in a following formats:

- PDFs
- Images
- MS Word Document
- MS PowerPoint

c. Past Papers

Past papers for different grades and of different topics or subjects will be available on the app. These past papers will be available in the app for the registered students, which provides them ease while studying and also in the preparation for their test or exams, through this feature users will also gain a benefit to see what kind of questions can be asked in future exams.

d. Discussion board

This feature will enable registered teachers and students in initiating a discussion board where they will be able to connect with the registered students and teachers to discuss their problems and topics.

e. Events/Session

The Einsteins Academy will also have a feature of scheduling live events and sessions and both teacher and students will be enabled to schedule a session and they will also be able to send invitation to their fellow members, and other

registered users who were not invited, but they will willing to join that specific session will be able to send a request to join a live session or an event and after the request will be accepted by the event scheduler than they will be able to join a live session. For this feature, zoom meeting will be integrated into the app. Note: All APIs will be provided by client.

vii.   Ratings and Reviews

This feature in the app will allow registered students to give feedback on the uploaded study material and students notes in the form of ratings and reviews, this will also help the teachers and other students to improve the content of their study material and notes.

viii.   Text to Voice

Text to voice feature will be integrated into the app so that the registered users will be able to listen to study material and the students available in the app. This feature will also enable users to record the content in audio while listening, so they can also listen to the audio later.

ix.   Followers

In this app registered users will be able to follow their preferred teachers or other students too, so that they will be notified whenever a new study material or student notes will be uploaded by the specific teacher or specific student. Both teacher and students will be able to remove any of their follower if they want.

x.   Push Notifications

The push notification option will be available in the application through which users will receive notifications such as new past papers uploading, any study material uploaded by any teacher or other student.

xi.   Side Navigation/Menu

The side navigation/menu screen will contain various app details and functions.

- Profile

- Notification Settings
- Privacy Policy
- Terms and Conditions
- Setting

a. Profile

Registered users will be able to view and edit their profile, where they will be able to add new or edit their existing informations. The students/user will be add the following details:

- Change Profile Picture
- Change Name
- E-mail Address,
- Change password
- Edit City or Country
- Edit Contact number
- All Student Notes uploaded by him/her
- All Followers

b. Notification Setting

In the notification setting, users will be able to change their notification settings according to their preferences. Users will also be able to turn on or off the notification setting.

c. Settings

Users can access the settings menu to customize the app according to their preferences. Users may turn off notifications, change the account password and make other necessary tweaks from the settings menu.

Application Features – Teacher

i.   Sign up / Registration

- Once the app is launched, users who are logging in for the first time would be required to sign up and create an account. Users will be required to provide the following details to sign up on the application.

  o   First and Last Name

  o   Password

  o   Confirm Password

  o   Email Address

  o   Phone Number

  o   City/Country

  o   Subjects

ii.   Home

After the login teachers will be able to access the home screen, where teachers will be able to view the list of their uploaded study material on the application. Teachers will also be able to create discussion board and events or sessions for the students.

The home screen will display the following features to the teachers:

- Study Material
  o   PDFs
  o   Audio
  o   Video
- Discussion Board
- Event/Sessions

a. Study Material

Teachers will be able to upload their study materials in this section. Each material will be shown to the registered students. Teachers will be able to add new study material in the form of PDFs, Audio and Video formats. They will also be able to delete their previous materials. Teachers will be required to upload their study materials in their respective subjects and the respective grades.

The study material will be uploaded in the form of following formats:

- PDFs
- Audio
- Video

b. Discussion board

In this feature teachers will be able to create discussion boards where they will be able to discuss any topic/subject of any grade, and registered students will be able to participate on that discussion.

c. Events / Sessions

This feature will enable teachers to create live event/sessions in the app through zoom live video. Teachers will also be able to send invitations to the students and other students who wants to join their sessions will be allowed to send request to the teacher/host of the event to join live event, and teachers will be able to accept or decline the request received from the students.

iii.   Ratings and Reviews

Teacher will be able to view the rating and reviews posted by students on their study materials which will help the teachers in improving their content quality. In case of any abusive review posted by any student, then teacher will be able to report on that review to the admin and admin will have a right to remove that review.

iv.   Followers

In the followers features teachers will be able to view the list of their followers which will be the students. Teacher will also have an option to remove any students if they want to.

v.   Push Notifications

Through push notification teachers will be able to receive notifications of any new follower, reviews and ratings on any study material's notification, also the request to join events and comments on discussion board and teachers will also be able to receive any notifications, which admin will send.

vi.   Side Navigation/Menu

The side navigation/menu screen will contain various app details and functions.

- Profile
- Notification Settings
- Privacy Policy
- Terms and Conditions
- Setting

a. Profile

In the profile teachers will be able to edit their profile or add any new information. Teacher will be able to add following features in the profile:

- Add/Edit Bio
- Followers List
- All uploaded Study Materials
- Change Profile Picture
- Change Name Edit Contact number
- Edit E-mail Address
- Change password

- Add/Update their address
- Add/update their city

b. Notification Settings

Teachers will be able to view and change their notification settings.

c. Setting

Through this feature teacher will be able to customize the app according to their preferences.

Application Features – Admin

i. Dashboard

The client will be provided with a web-based admin console where they will be able to manage the application's functionality.

ii. User Management

Admin will be able to view the list of users registered on the application. They will be able to view each user's activities, profiles, and details on the app. Admin will be able to block/unblock a user in case of policy violation. This section will show:

- App users' management
- Reported user management
- Blocked user management
- Preference-based users
- User analytics

Monitoring the user actions through the admin panel to have authenticated users into the system is necessary as it shall provide the genuine users a better environment which in turn shall be helpful in growing the buzz of the application.

iii. Content Management

The admin will be able to add, update and delete the content on the mobile application. Once the admin updates the information in the admin panel, it will reflect accordingly on the mobile application.

iv. Push Notifications

Admin will have the right to use the Push Notification feature in the App, through which he will be able to send notifications to the registered users in the app regarding the latest uploading of past papers and other notifications related to the apps or academics.

v.   Report and Analytics

The Einsteins Academy admin will have all the real-time reports and analytics about every registered user on the application.

In-app Advertising

- In-app advertising is an effective monetization strategy for app owners, in which app owners get paid to display advertisements within their app. With sophisticated data tracking and user targeting, the in-app environment also allows advertisers to reach consumers with pinpoint accuracy.

- Since apps are able to collect first-party data on an opt-in basis, they are also able to pass valuable targeting parameters such as gender and age. This makes it easy for advertisers to precisely reach their ideal audience through in-app advertising.

- There are a variety of ad formats that serve different purposes in order to reach a user and get them to engage and ultimately drive higher revenue. Here are the main ad formats for in-app advertising:

i. Native Ads

- As the name suggests, Native ads fit the native look and feel of non-advertising content units within an app.
- This creates a highly-effective and non-disruptive user experience where advertisements feel like native in-app content and are perceived as a welcome suggestion or idea.

ii. Video Ads

- Mobile video advertising is an integral part of a successful advertising strategy that engages audiences on the small screen.
- By leveraging the unique qualities of mobile devices, mobile video ad formats can effectively deliver engaging brand messages.

iii. Banner Ads

- Also known as display ads, banner ads are a traditional method of advertising that takes up space either at the top or bottom of a screen.
- Although small in size, these ads have a huge reach, which makes them an effective option for creating brand awareness.

Note: Third-party advertising platforms will be integrated into the app to monetize their app by enabling in-app advertising.

App Flow Diagram

Study App Flow Diagram
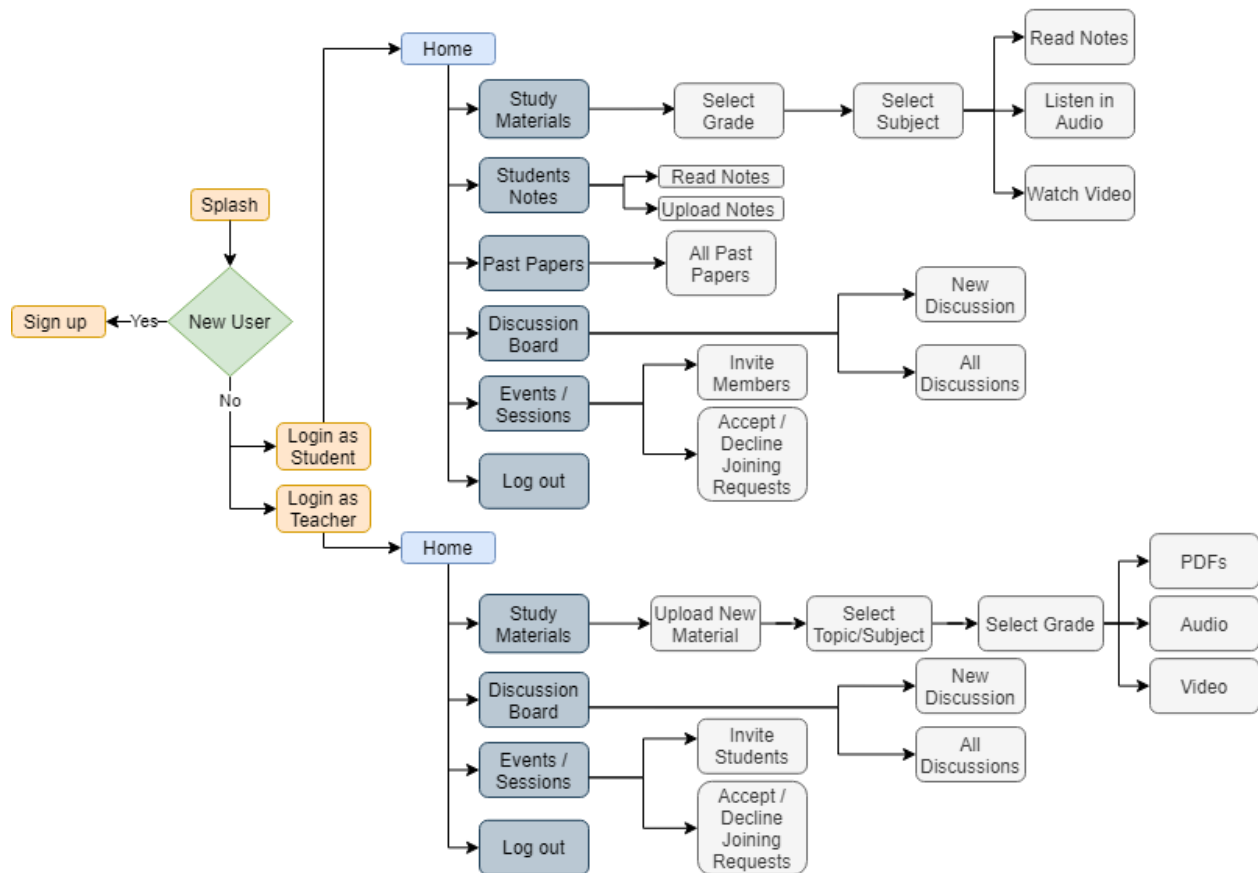
5. Tech Stack

Einsteins Academy Tech Stack:

Platforms

- Mobile App – iOS and Android
- Web-based admin panel

Development Tools

- Flutter 2.0
- React JS

Database

- MongoDB
- Node JS

SDK, API Details

- Firebase Cloud Messaging (notifications)

Project Management

- JIRA Portal for Progress Update

6. Development Approach

The mobile application development process is modeled as a series of seven sequential phases, collectively referred to as the software development life cycle. Each phase of the software development life cycle is characterized by specific activities and the products produced by those activities. The seven phases divide the software life cycle into consecutive time periods that do not overlap.

Discovery

We work with clients to understand their business and we merge their initial concept with everything the APPSTIRR team knows about the software. We'll assess the possible challenges and identify the ways to overcome them.

Features & Architecture

We establish what features go into the product and how they will work together. Here, our team drafts a skeletal framework for the software in the form of wireframes.

Design

When it comes to first impressions, it's all about design. Our team will put our passion for good design to work and based on approved wireframes we will design all screens.

Development

The development process is broken down into sprints based on feature sets. Our development process will allow client to regularly review and assess what our team is developing.

Quality Assurance

Our Quality Assurance team will test the software after each development sprint and once all major functionality is implemented, we will prepare a Beta Build.

Launch

After passing the Beta Build through a final round of QA and refinements, we will provide a final build for release. We can either deploy the software for the client or provide client with everything they need to deploy it themselves.

Maintenance

We provide our clients with a 01 Month warranty period, free of charge, for maintenance and support in terms of repairs and bug fixes.

7. Project Schedule

Following table discusses the project functions and activities with the corresponding timelines and dates. This timeline will be maintained throughout the duration of the project. Additional project team meetings or meetings with the client can be scheduled as needed.

7.1   Gantt Chart

Table below shows Einsteins Academy Bird Project Schedule.

Task Name	Duration	Work	Start	Finish
Einsteins Academy App Timeline	79.58 days	732 hrs	Mon 11/10/21	Fri 14/01/22
Requirement Gathering	10 days	102 hrs	Mon 11/10/21	Thu 21/10/21
Software Requirement Document	10 days	70 hrs	Mon 11/10/21	Thu 21/10/21
Specification of Architecture	4.57 days	32 hrs	Mon 11/10/21	Thu 14/10/21
Milestone 1 - Design Kick Off	*0 days*	*0 hrs*	*Thu 14/10/21*	*Thu 14/10/21*
Designing	16.57 days	116 hrs	Thu 14/10/21	Thu 04/11/21
App Design Screens	16.57 days	116 hrs	Fri 15/10/21	Thu 04/11/21
Logo Design (Pending)	0 days	0 hrs	Thu 14/10/21	Thu 14/10/21
Milestone 2 - Client Approval	*0 days*	*0 hrs*	*Thu 04/11/21*	*Thu 04/11/21*
Alpha Development	18.57 days	130 hrs	Thu 04/11/21	Fri 26/11/21
Alpha Build	14.29 days	100 hrs	Thu 04/11/21	Mon 22/11/21
Alpha Testing	4.29 days	30 hrs	Tue 23/11/21	Fri 26/11/21
Milestone 3 - Alpha Build Client Approval	*0 days*	*0 hrs*	*Fri 26/11/21*	*Fri 26/11/21*

|				
Beta Development	21.72 days	252 hrs	Fri 26/11/21	Thu 23/12/21
Frontend Development	10 days	70 hrs	Fri 26/11/21	Thu 09/12/21
Backend Development	11.43 days	80 hrs	Fri 26/11/21	Fri 10/12/21
Setup Development	4.29 days	60 hrs	Fri 10/12/21	Thu 16/12/21
Admin Panel	6 days	42 hrs	Thu 16/12/21	Thu 23/12/21
Milestone 4 - Build Released for Testing	*0 days*	*0 hrs*	*Thu 23/12/21*	*Thu 23/12/21*
Testing	17.14 days	120 hrs	Thu 23/12/21	Thu 13/01/22
Test Requirement	2.14 days	15 hrs	Thu 23/12/21	Mon 27/12/21
Test Planning	4.29 days	30 hrs	Mon 27/12/21	Fri 31/12/21
Test Design	2.14 days	15 hrs	Fri 31/12/21	Tue 04/01/22
Test Integration	5 days	35 hrs	Tue 04/01/22	Mon 10/01/22
Test Reports & Acceptance	3.57 days	25 hrs	Mon 10/01/22	Thu 13/01/22
Milestone 5 - Final Build Approval	*0 days*	*0 hrs*	*Thu 13/01/22*	*Thu 13/01/22*
Deployment	1 day	12 hrs	Thu 13/01/22	Fri 14/01/22
Appstore Deployment	1 day	7 hrs	Thu 13/01/22	Fri 14/01/22
Playstore Deployment	0.71 days	5 hrs	Thu 13/01/22	Fri 14/01/22
Milestone 6 - App Deployed on Store	*0 days*	*0 hrs*	*Fri 14/01/22*	*Fri 14/01/22*

Note:

Timeline mentioned in the Gantt chart above is exclusive of client approvals and app store publishing/deployment.

8. Project Resources

Following are the resources involved in the Einsteins Academy Mobile App development project:

- Project Manager
- Business Analyst
- Design Lead
- UI Designer
- Mobile App Developers
- Software Architect
- Technical Lead
- Software QA Manager
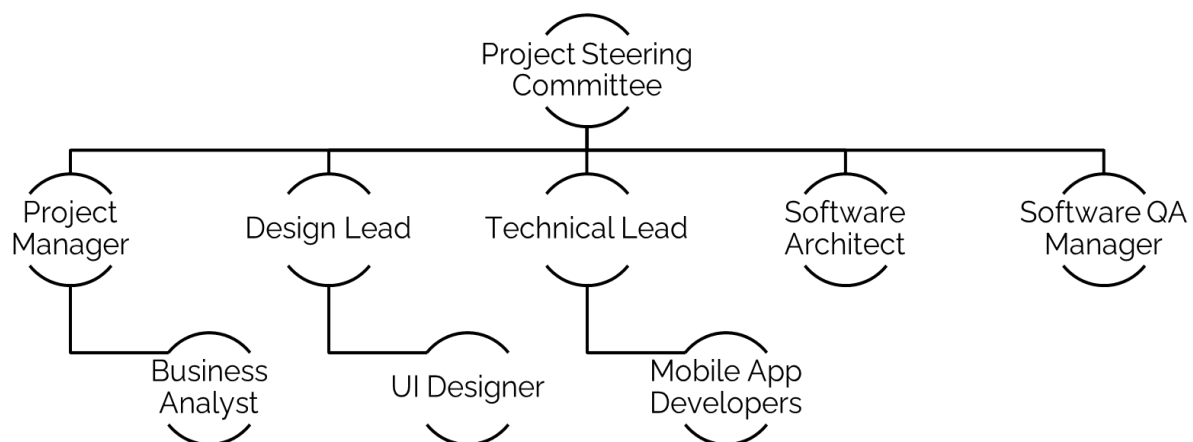
Project Hierarchy

8.1   Project Team Titles and Responsibilities

Following are the titles and responsibilities for the resources involved in the Einsteins Academy Mobile App development project.

Position	Responsibilities
Project Manager	- Overall supervision of project and team - Delegates requirements - Maintains project plan - Performs implementation - Arbitrates issues that may arise
Business Analyst	- Analyzes software requirements - Manages all project documentation - Ensures requirements are established correctly
Design Lead	- Oversees, delegate and coordinates design tasks to design team - Contributes to and takes ownership of design strategies
UI Designer	- Taking design briefs to understand requirements. - Translating requirements into style guides, design systems, design patterns and attractive user interfaces.
Mobile App Developers	- Create, maintain, and implement the source code to develop mobile apps - Oversees corrections received from the QA Manager - Implements software changes - Updates software

Software Architect	- Designs program code - Performs implementation
Technical Lead	- Delegating work and assignments to team members. - Guiding development team through technical issues and challenges
Software QA Manager	- Checks software against documents - Test changes made by development team
Project Steering Committee	- Advice, ensure delivery of the project outputs and the achievement of project outcomes - Advice on budget - Set priorities in the project

8.2   Resource Allocation Estimates

Following are the Einsteins Academy Mobile App resource allocation estimations.

S. No.	Resources	# of Resources	Total Hours
1	Software Architect	1	32
2	Project Manager	1	70
3	Technical Lead	1	32
4	Design Lead	1	16
5	Designer and UI	1	100
6	Mobile Developer	1	200
7	Backend Developer	1	150
8	Quality Assurance	1	120
Total			720

Note:

Estimated effort hours presented above are exclusive of client approvals and app store publishing/deployment.

9. Project Quality

At APPSTIRR, quality is important than anything else and by quality we refer to sheer compliance and comprehensive performance of the products we develop. APPSTIRR opts the waterfall testing topology against all other methodology due to the operational superiority of the program. Testing can begin at the start of the project with continuous integration between development and testing. All the units developed in the implementation phase are integrated into a system after testing of each unit. Post integration the entire system is tested for any faults and failures. APPSTIRR team works as a single team towards a common objective of achieving Quality.

10. Communication Management

As a time critical process, each team member will monitor the development schedule and report any setbacks to the project lead. The customer will be kept apprised of current team progress through weekly progress reports, and there will be weekly group discussions with both the team members and the customer present to monitor development and discuss any new criteria for the project. Email will be the primary medium used to keep the customer and members up to date in between group meetings.

11. Project Handover and Delivery

APPSTIRR will provide the complete project source code to the client as part of our handover and delivery phase. Once the source code has been shared, a project closure and handover form will be provided which will be signed by client, marking the end of the project. Having the source code will allow the client to manage and maintain the mobile application in-house.

12. Assumptions

Following are the assumptions expected to be understood by both parties:

2. The system is only going to have the features mentioned above in the scope section.

3. For new functionality or any modification in the functionality, company's change request process will be followed, and the new functionality or modification will be implemented in the next release.

4. The client is going to provide all relevant information for application design and development.

5. Following devices and browsers will be compatible with this project.

    - iOS: iPhone 6 to latest.

    - Android OS: 6 to onwards.

    - Browsers: Mozilla Firefox, Google Chrome, and Microsoft Edge (Latest Version)

6. The client will provide access credentials required for mobile application development/deployment such as Hosting, Apple and Play store credentials, etc.

7. The client will provide third-party SDKs/APIs access such as Zoom, text to speech etc.

13. Exclusions

Following are the project exclusions expected to be understood by both parties:

1. Writing texts in-app by APPSTIRR is not part of the current scope.

2. Creating app store optimization content about the application for Google Play/App Store is not part of the current scope.

3. Entering objects in the CMS is not part of the current scope.

4. Hosting services are not provided by APPSTIRR.

5. Functionalities not described in this document are treated as out of scope.

14. Signatures

Appstirr agrees to the development outlined in this agreement.

For the Service provider – Appstirr

Name: Joe Carter

Signature: **DocuSigned by:**
Joe Carter
9459405EB89E496...

Title: Account Manager

Date: 12/16/2021

For the Client – Einsteins Academy

Name: Ziyaanah Ahmad

Signature: **DocuSigned by:**
Ziyaanah Ahmad
3A2CA0175448480...

Title: Client

Date: 12/7/2021

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