

A TechnoTackle Case Study



Project Title

Futuristic School



Type of Business

Education Technology (EdTech)



Type of Document

Case Study



Scope Of Work

IT Development ,
Service and Maintenance



Website URL

[Explore Site](#)



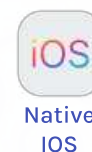
Mobile App URL

[Explore IOS App](#)

[Explore Android App](#)



Tech Stack



FUTURISTIC

S C H O O L

* Please note that certain screenshots in the case study are presented with dummy data for illustrative purposes. The information depicted is not real but serves to demonstrate the functionality of the application.

Client Accolade

Working with the founder of Techno Tackle , Mr. Balavishnu , even before its inception, gives me a feeling of pride. Today I have witnessed the growth of Techno Tackle from a single employee to over 70 full time developers. For my startup, techno tackle has always served as a backbone.

As a SaaS provider, we need to develop our product constantly as per the client needs and have to make flexible solutions , so that these solutions can cater to a variety of customers. So this needs a reliable collaboration in order to provide services to our customers in a time bound and effective manner.

Today we have entered the 10th year of our existence and serve over 100 schools with our product. It was never possible without Techno Tackle as our startup has never hired any other developers on our own or outside techno tackle.

Without doubt , our relationship with Techno Tackle is going to last till the time we remain in business and wish them good luck for their upcoming projects.



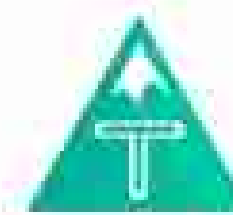
Simrandeep Kaur

Founder

Futuristic Schools

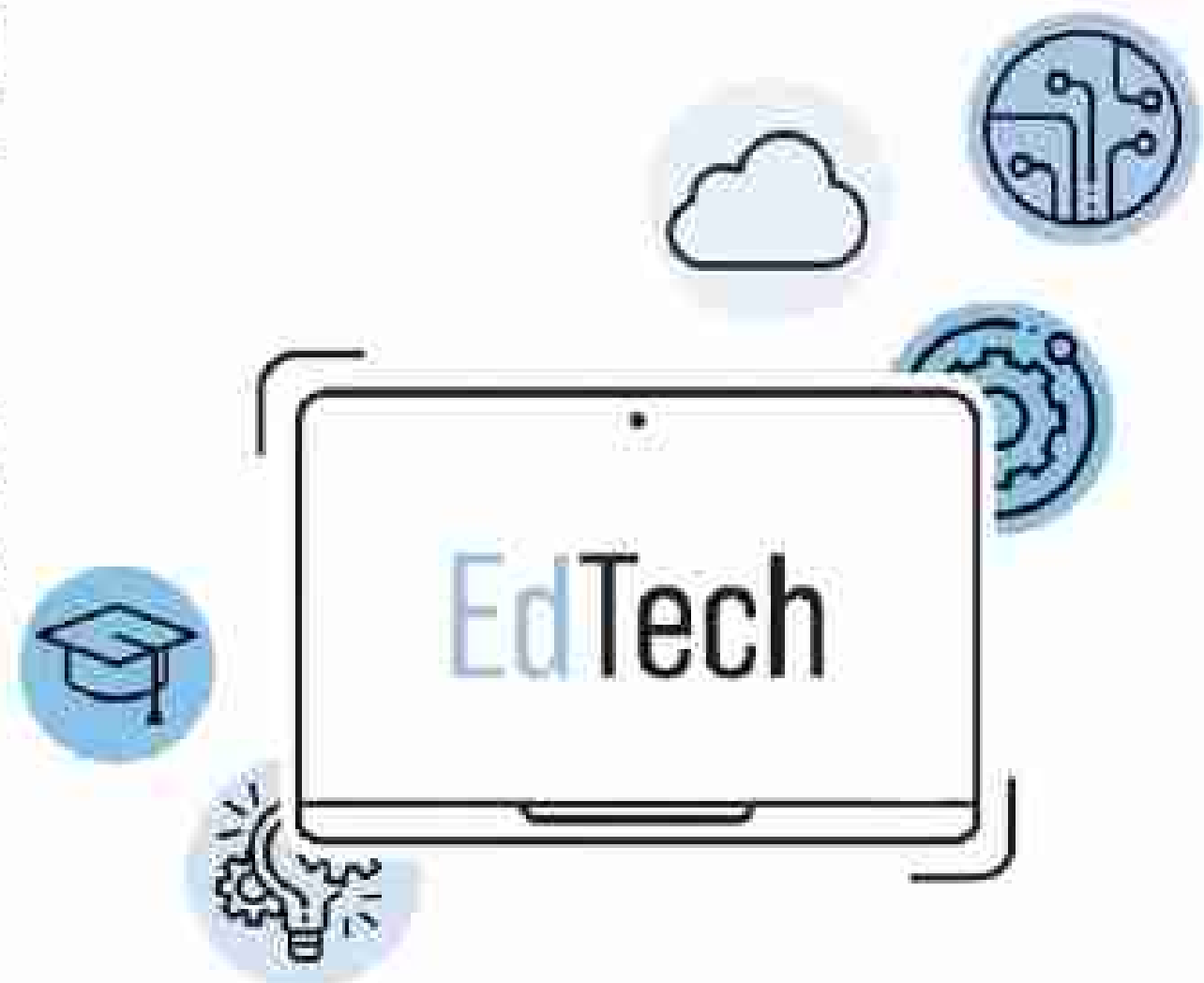


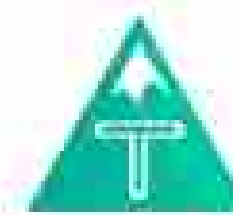
To watch the video testimonial



About the client company

- ❖ The client established their business in 2015 with the intention of developing a SaaS based ERP product designed for the education sector - specifically for schools.
- ❖ The business has achieved significant success to date with numerous prominent schools in and around Punjab adopting the client's EdTech SaaS based product to manage their operations.
- ❖ Over 1,50,000 students use the product and the client's business is growing right along with the expanding SaaS market.
- ❖ This success has allowed the client to continually improve their product with a focus on innovation and customer satisfaction and the business is well positioned for continued growth in the years to come.

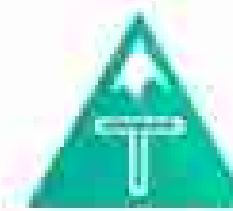




Client Objectives

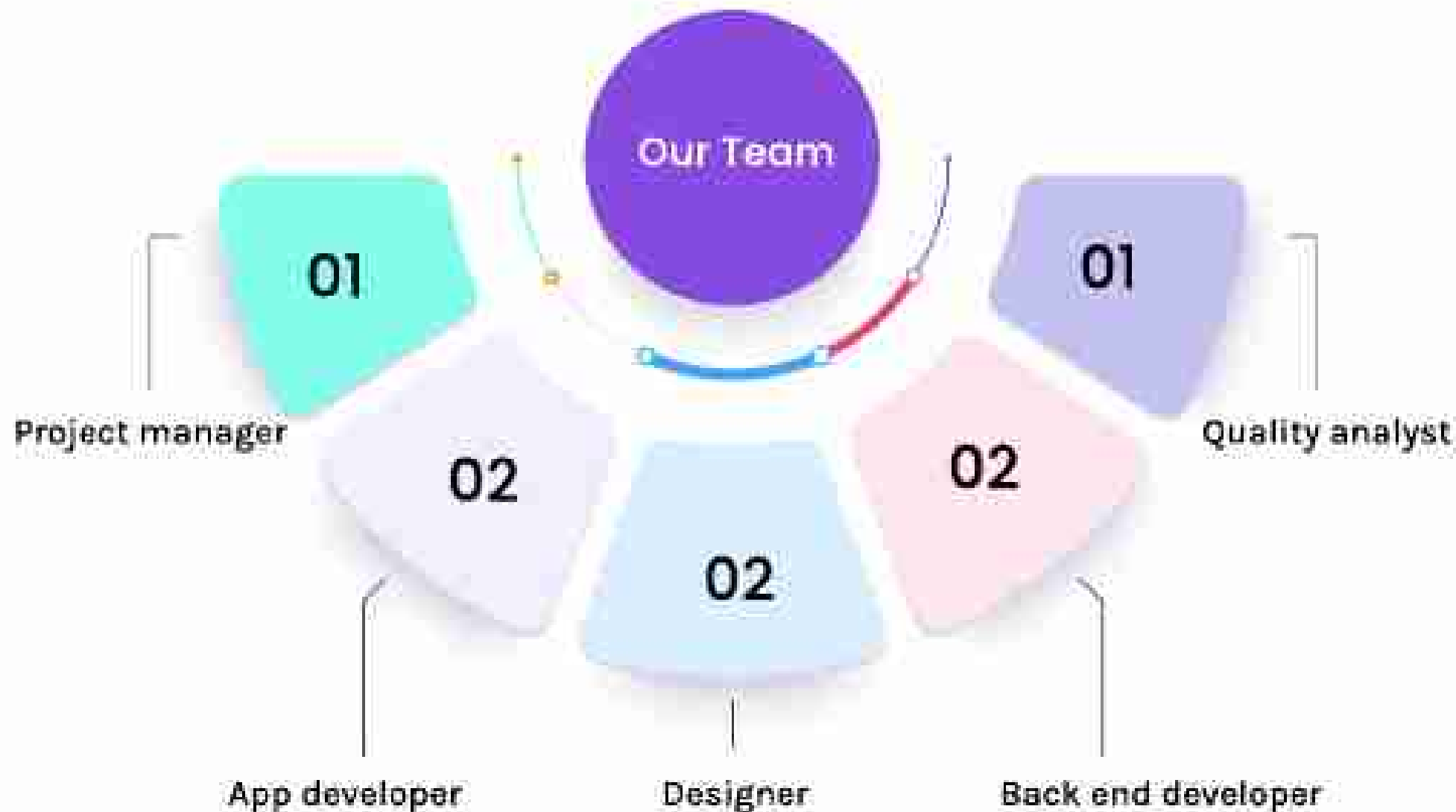
- The client approached Techno Tackle with a clear intention of converting her idea into an EdTech business.
- The client wanted to develop a product that efficiently manages school functionalities within a single platform.
- The client sought to develop a unified platform for efficient school management, students, parents and school administration with specific features and logins.
- For parents, this meant remote access to manage student activities and details - minimizing school visits. For teachers, this meant to provide comprehensive information to parents regarding attendance, marks, performance and notifications within the app - streamlining communication and reducing the need for direct interaction except for essential meetings and events.
- Eventually ,Techno Tackle's technical team successfully translated these requirements into a functional EdTech product that is now being utilized by over 100 schools.





Project Management and Team Structure

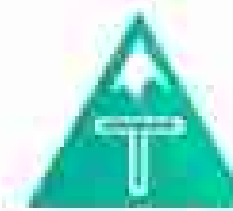
We have implemented the Software Development Life Cycle (SDLC) process for developing and managing projects requirement gathering, design, development, testing and deployment. Our team comprises of as mentioned below:



Architecture & Technologies

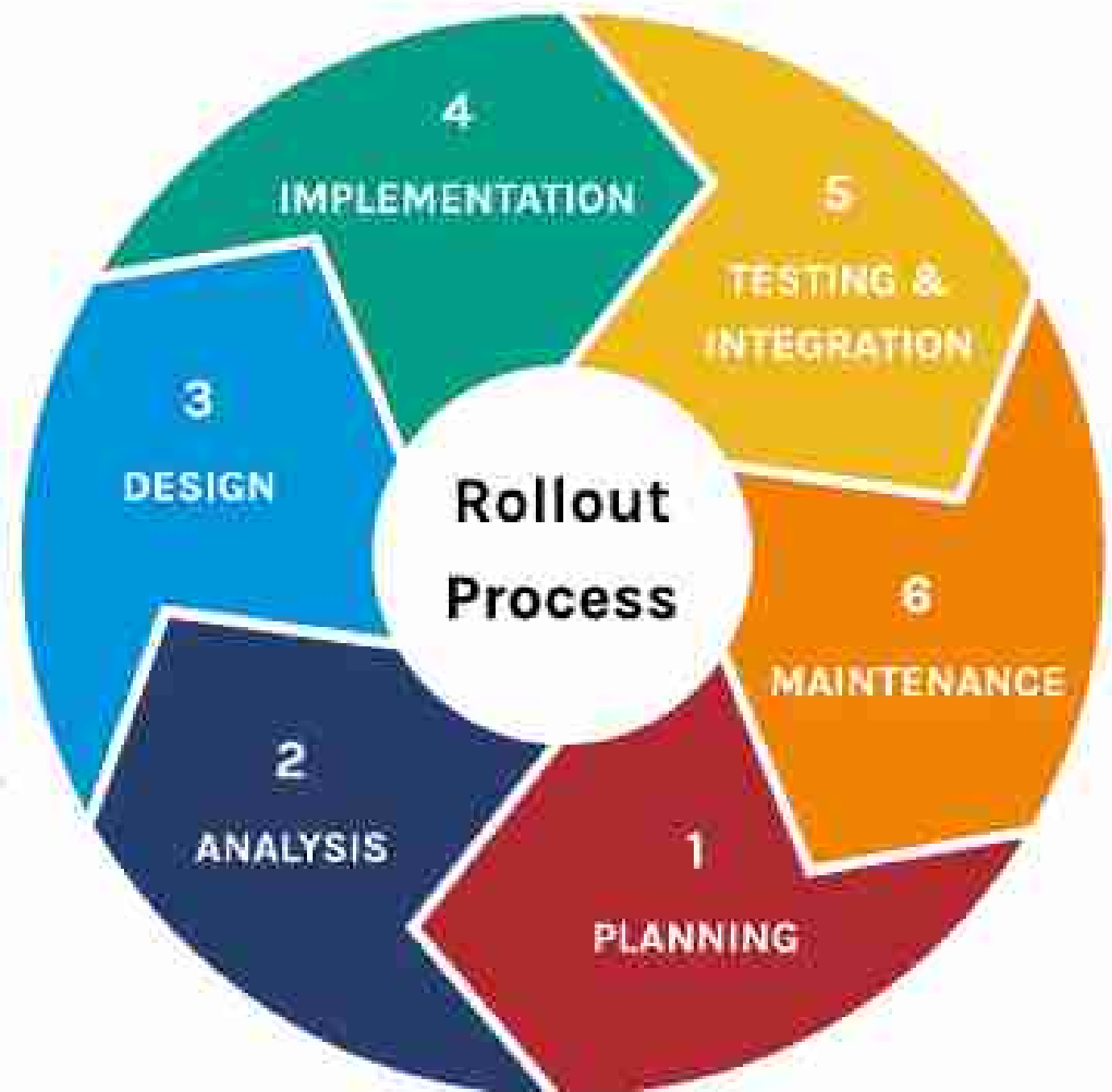
The app and the web application were developed based on the MVC architecture. The technologies involved in design and development are mentioned below:

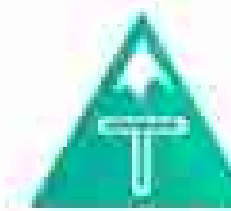




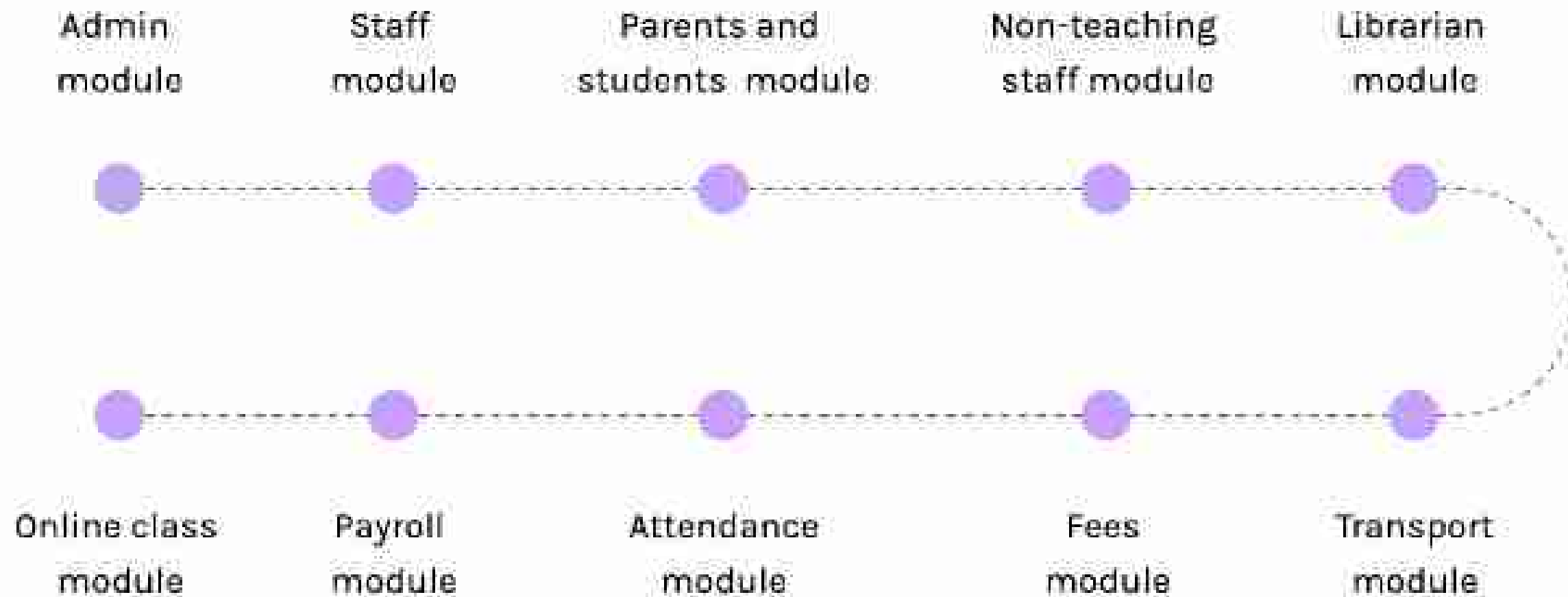
Feature Rollout Process

- ❖ Client requirements can involve two possibilities: implementing new features or enhancing existing features within the current system (mobile and web application).
- ❖ Upon receiving client requirements the technical team conducts a feasibility study on the requirements then the development team completes the development, followed by testing by the testing team.
- ❖ The client reports bugs that arise in the current IT system through an issue tracking tool. The development team fixes it and the testing team verifies it before deploying them to production.

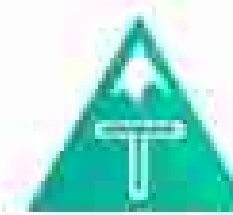




Modules in the Application



The above modules are implemented with interactive UI pages in both the mobile and the web application



Module Overviews

Admin module

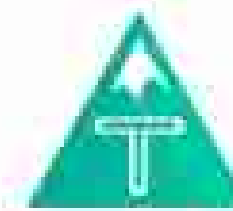
- The Admin module enables administrators to add staff, non-teaching staff, students and parents. Also, Admin provides access based on user roles - allowing staff, non-teaching staff, students and parents to view relevant pages in the application.

In addition to managing user access the admin have access to:

- Detailed views of all users - staff, non-teaching staff, students, parents and transport.

For e.g. Admin can view all the student details - student and parents information, fee payment status, school bus boarding details, academic marks, library usage and books borrowed from the library.





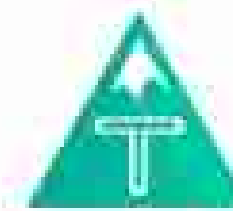
Staff module

Through staff login, staff members can perform the below activities :

- ❑ Create student profiles and mark students' attendance.
- ❑ Send absence notifications immediately or through scheduled cron jobs and notify parents about student absences. Record exam marks for every student.
- ❑ Generate students progress report - which can be viewed and downloaded by students and parents.
- ❑ Generate online class links (Zoom) with date, time, subject and class details and also generate online class reports including attendance details.
- ❑ Send common messages(as a notification to mobile phones) to the respective class students and parents.
- ❑ View term fee payment status of students and school details - like which student is traveling in which bus.



A TechnoTackle Case Study



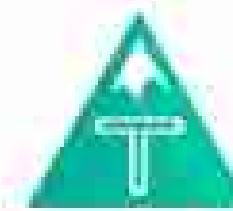
Techno Tackle®
Software Solutions
An ISO 27001:2013 Certified Company

Parents and students module

Through the parents and students login, students and parents can perform the following activities:

- View student and parents profiles.
- Access fee details and make online fee payments through the app and check the payment status.
- View attendance details and notifications.
- Access exam marks and download report cards.
- Check library book details - including availability of books and borrowed book history.
- View school bus details and track its current location, with advance notifications on bus arrival before the students location.
- View messages posted by teachers and school management
- Enable students to search for books using various criteria such as title, author and the subject.

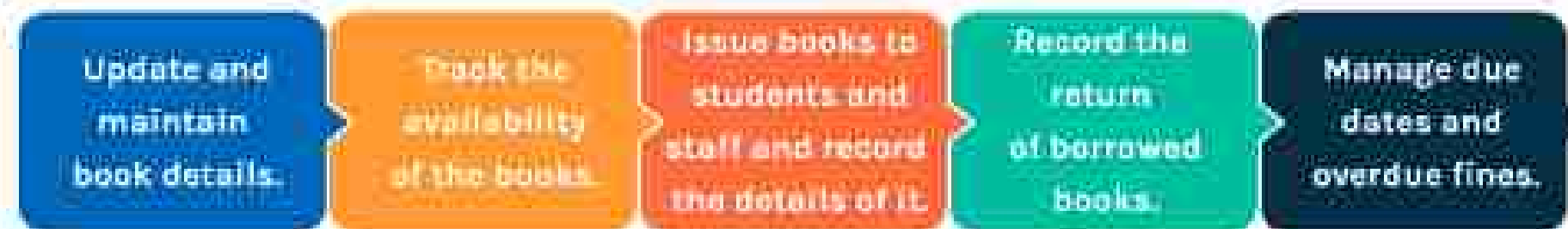




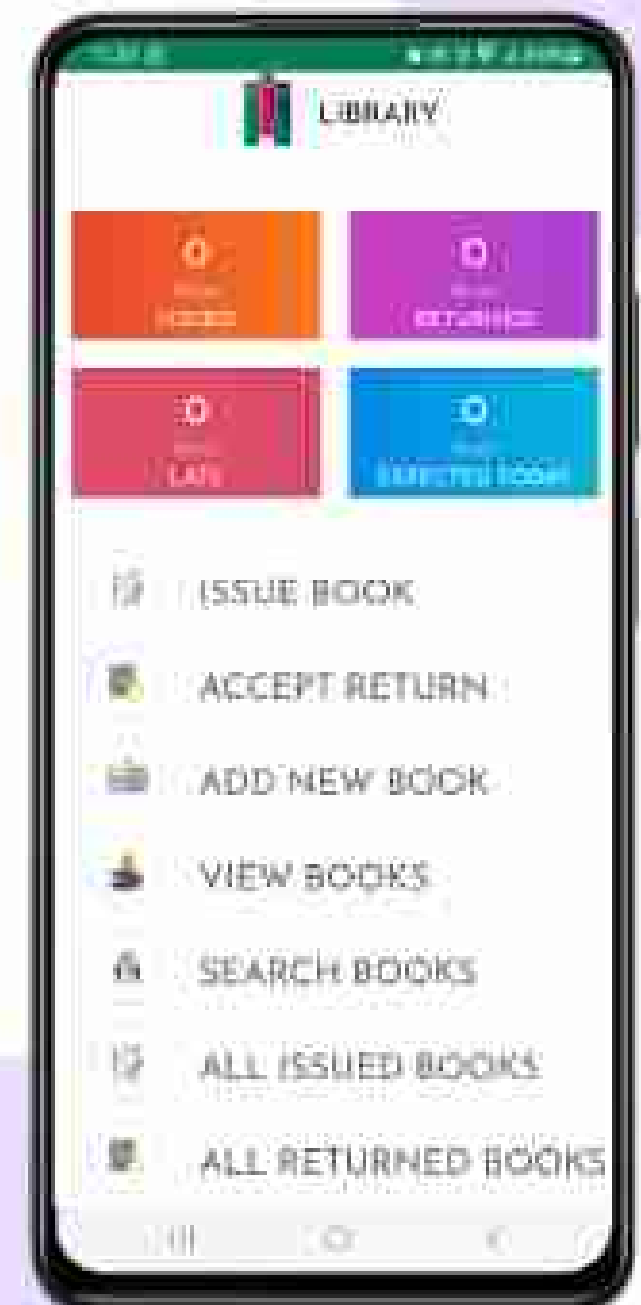
Non-teaching staff module

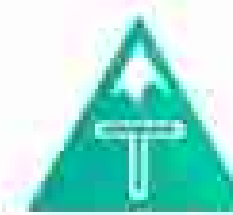
Non-teaching staff can perform the below mentioned activities :

- With the library management feature , librarians can perform below mentioned activities and it can be viewed by students and staff.



- Front desk executives and security personnel can use the web application to record the login and logout details of parents,visitors and students from the school premises and view all students and their parents details.
- While driving the school bus, once the driver logs into the mobile application then the bus tracking will be done even if GPS facility is not implemented in the bus.

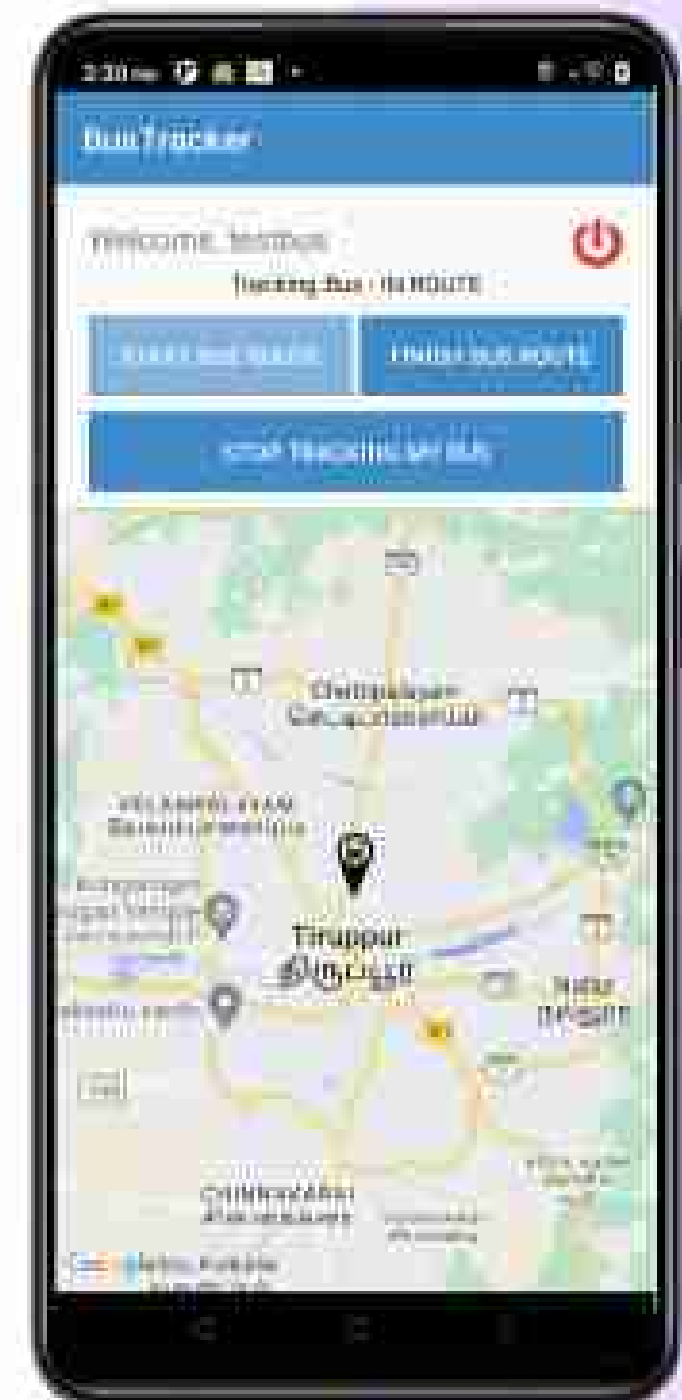


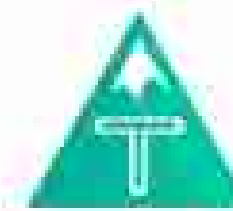


Transport module

Transport incharge can perform the below mentioned activities :

- Manage driver and bus details, student and staff details including buses allotted to them and their pick up and drop locations.
- Track bus locations using GPS technology.
- Monitoring payment details for transport services and view student and staff payment statuses.
- Recording and managing expenses related to transport services - bus maintenance, fuel consumption and repairs.
- Managing payment details with vendors - if the school bus is purchased from an external supplier on a contract basis.

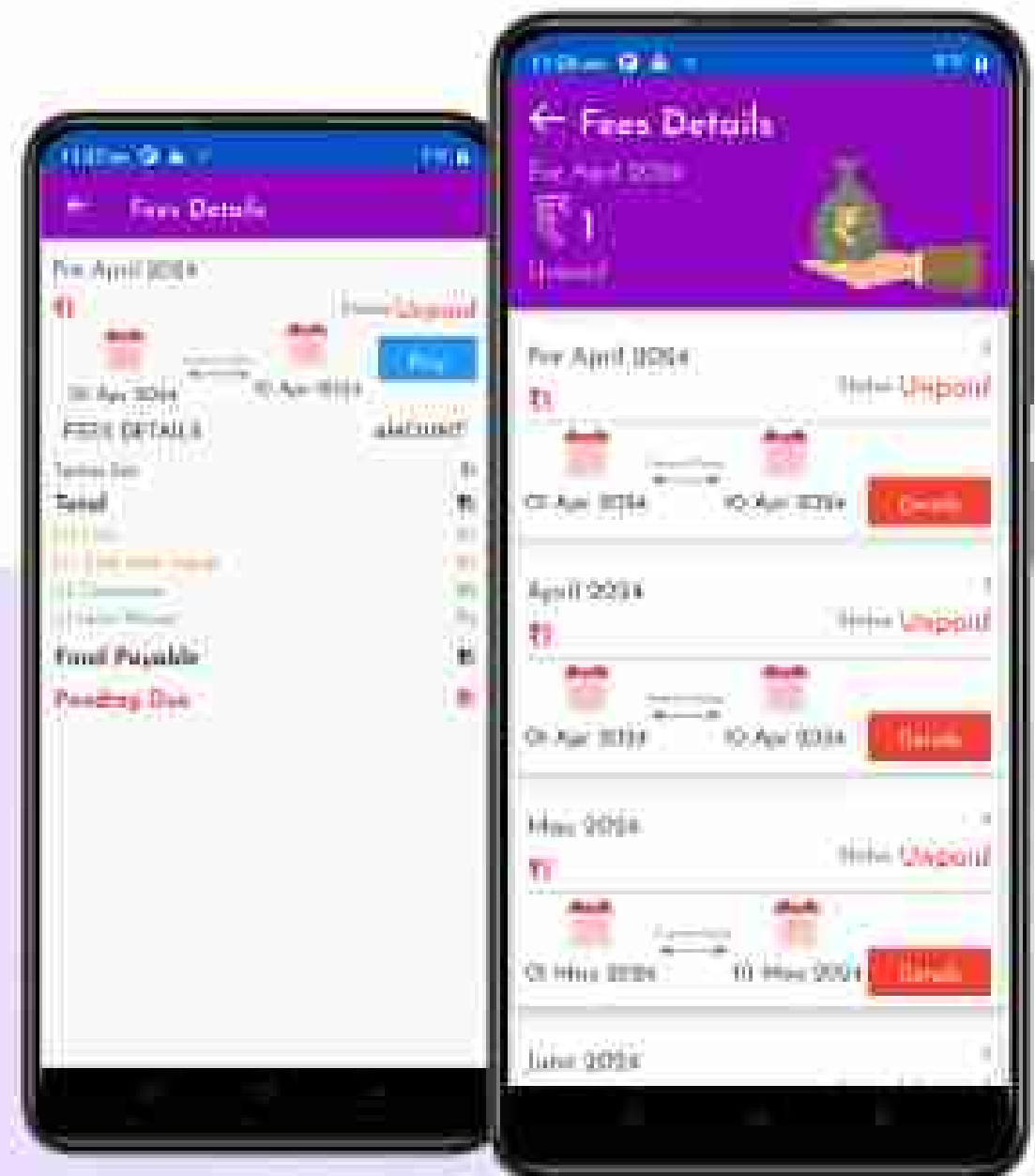


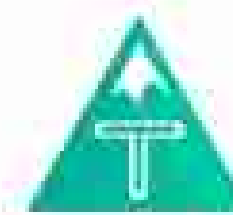


Fees module

Below are the activities that can be performed in fees module :

- Students and parents can pay term fees through the mobile and web applications.
- Through web applications offline term fee payments can be processed at the school or designated banks and updated payment status can be viewed by students , parents , admin and the teaching staff.
- Notifications for unpaid term fees can be sent to students (who miss the due date) and these notifications can be viewed by both students and parents.





Attendance module

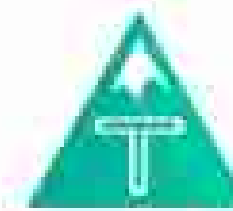
Below are the activities that can be performed through attendance module :

- ❑ Respective teaching staff can mark student attendance period wise - restricted to their assigned classes and subjects only.

For e.g. if a staff member is assigned to teach English for section A in the second standard then they can only mark attendance for that specific student only. They cannot mark attendance for classes or subjects outside their allotment.

- ❑ Absence notifications will be sent to students and parents immediately after attendance is marked by staff or through cron jobs at the scheduled time.
- ❑ Attendance records can be viewed by administrators, students and parents.





Payroll module

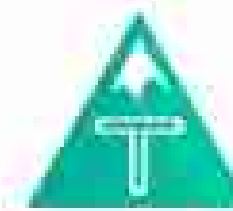
Below are the activities that can be performed through payroll module :

- Salary details of all teaching and non teaching staff are recorded and managed here.
- Staff attendance details are recorded and managed here.
- Based on the leave requests raised by the staff, the total leave details and Loss of Pay (LOP) details can be viewed here.

Note : Salary processing can not be performed through this application.

The screenshot shows the 'Employee Salary Setup' window. It has a purple header bar with the title. Below the header, it says 'Showing 1-10 of 21 results'. There is a table with the following columns: 'Employee Setup', 'Employee', 'Department', 'CTD (Per Month)', and 'Actions'. The table contains 10 rows of data. Each row has a small icon in the 'Actions' column.

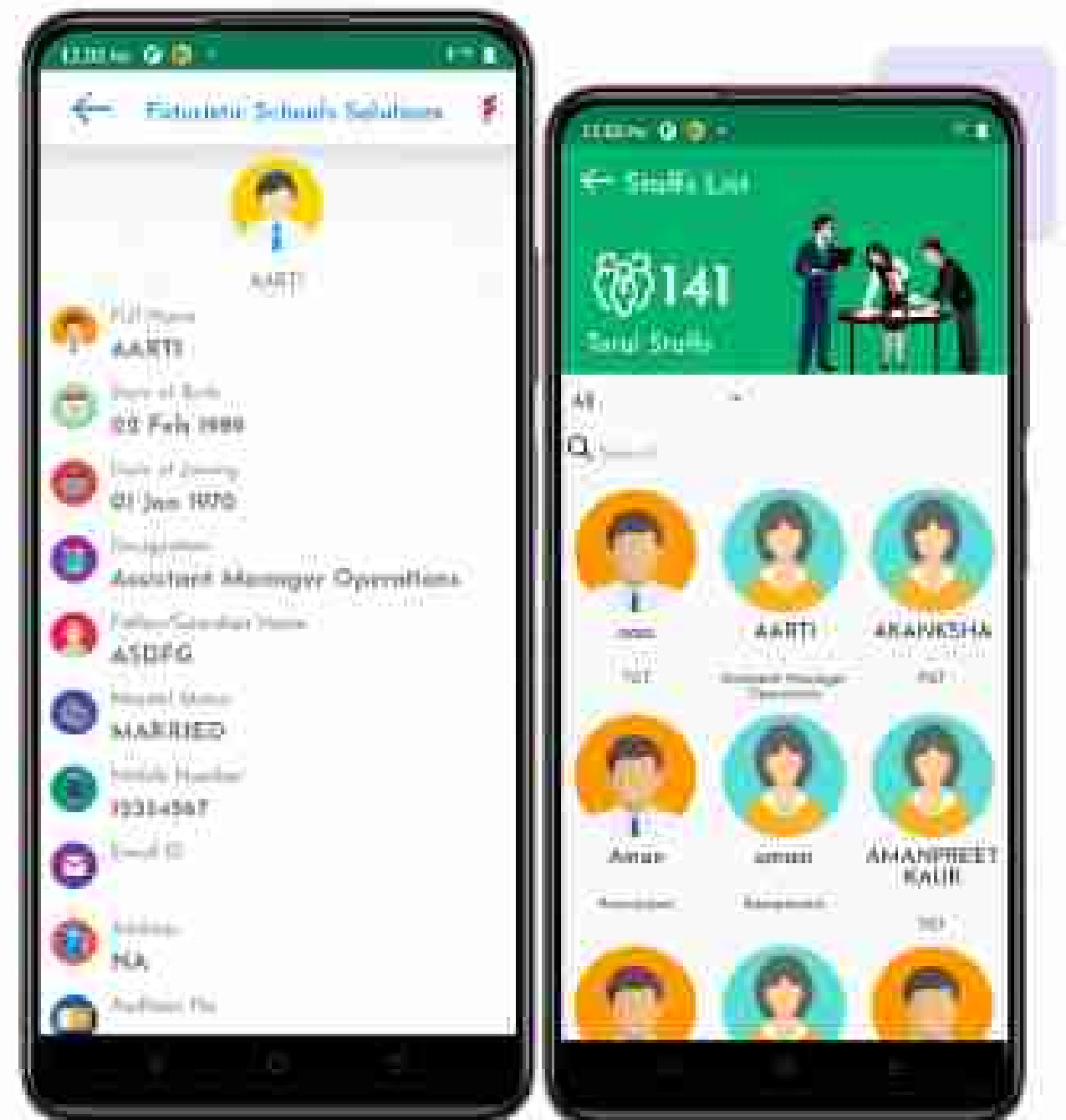
Employee Setup	Employee	Department	CTD (Per Month)	Actions
	All	All		
16	HARSHAD K. SHARMA	Executive	2000	
17	Rohini	Management	1500	
18	S. Jithendra	Central	2000	
19	Anil	Administration	2000	
20	Amrita	Teaching	1500	
21	Parvathi Singh	Teaching	1500	

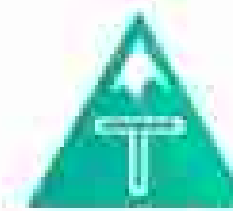


Staff allocation module

Through the staff allocation module, the admin can perform the following activities :

- 1. Create staff profiles and assign roles like the class teacher for specific classes.
- 2. Allocate subjects that the respective staff member will teach for different standards.
- 3. The staff can view the details of only those students in the standards they are assigned to.



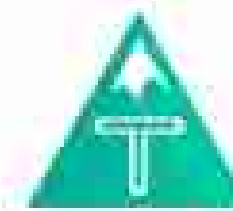


Online class module

Through the staff allocation module, the admin can perform the following activities :

- Generate Zoom links for online classes with detailed inputs such as for which standard, start time, end time and the subject details.
- Generate reports from online classes to view attendance details.
- Generated zoom links are shared with respective standard students only - based on criteria set during link generation.



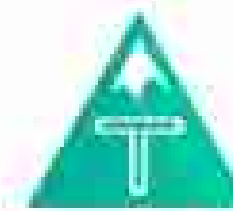


Bug Fixing and Maintenance Process

Our team is addressing and resolving bugs that have been reported in the current system as part of our ongoing service and maintenance process.

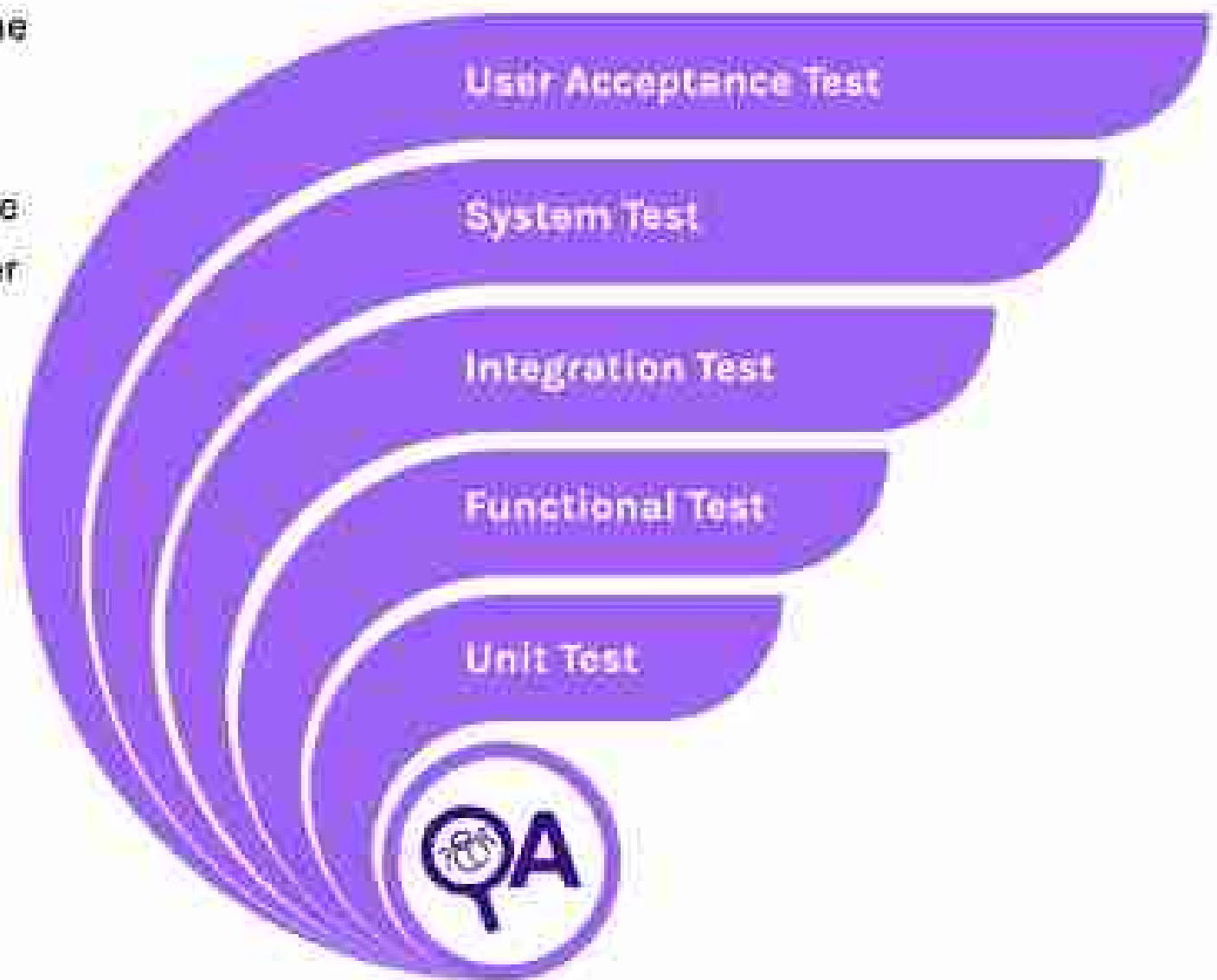
- ❑ Bugs are classified into three categories: High, Medium and low.
- ❑ High priority tickets are addressed with the utmost urgency and fixed as soon as possible. We consistently prioritize and fix high priority tickets promptly.
- ❑ Medium and low priority tickets are also addressed and fixed consistently within the agreed Service Level Agreement (SLA).





Comprehensive testing process

- ❑ Developers perform unit testing to ensure the fixes are implemented correctly.
- ❑ Functionality and regression testing are conducted by the testing team using proper test scripts.
- ❑ Once testing is completed, the client performs user acceptance testing to validate the fixes.
- ❑ After successful user acceptance testing, the fixed bugs are deployed to the production environment.



The Conclusion

1

Techno Tackle has been a trusted partner for the client in providing comprehensive IT development and support focused on maintaining and enhancing the client's current software systems.

Additionally, through a dedicated team we address and resolve bugs and ensure the smooth and efficient operation of our client's current software applications.

2

3

As a result, Techno Tackle's dedication on keeping the client's IT systems running flawlessly has also positioned the client's business for continuous growth.

Here is the proof - [click here](#) , some of the schools in India currently using the client's SaaS based Futuristics school(EdTech) product.

4

Connect With Us

Stay connected with Techno Tackle on [our LinkedIn page](#).

Browse Techno Tackle's website [here](#).

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Position: Founder&CEO

Linkedin: [Founder's LinkedIn profile](#)

Email: balavishnu@technotackle.com



We appreciate your interest in Techno Tackle Software Solutions and look forward to collaborating with you.