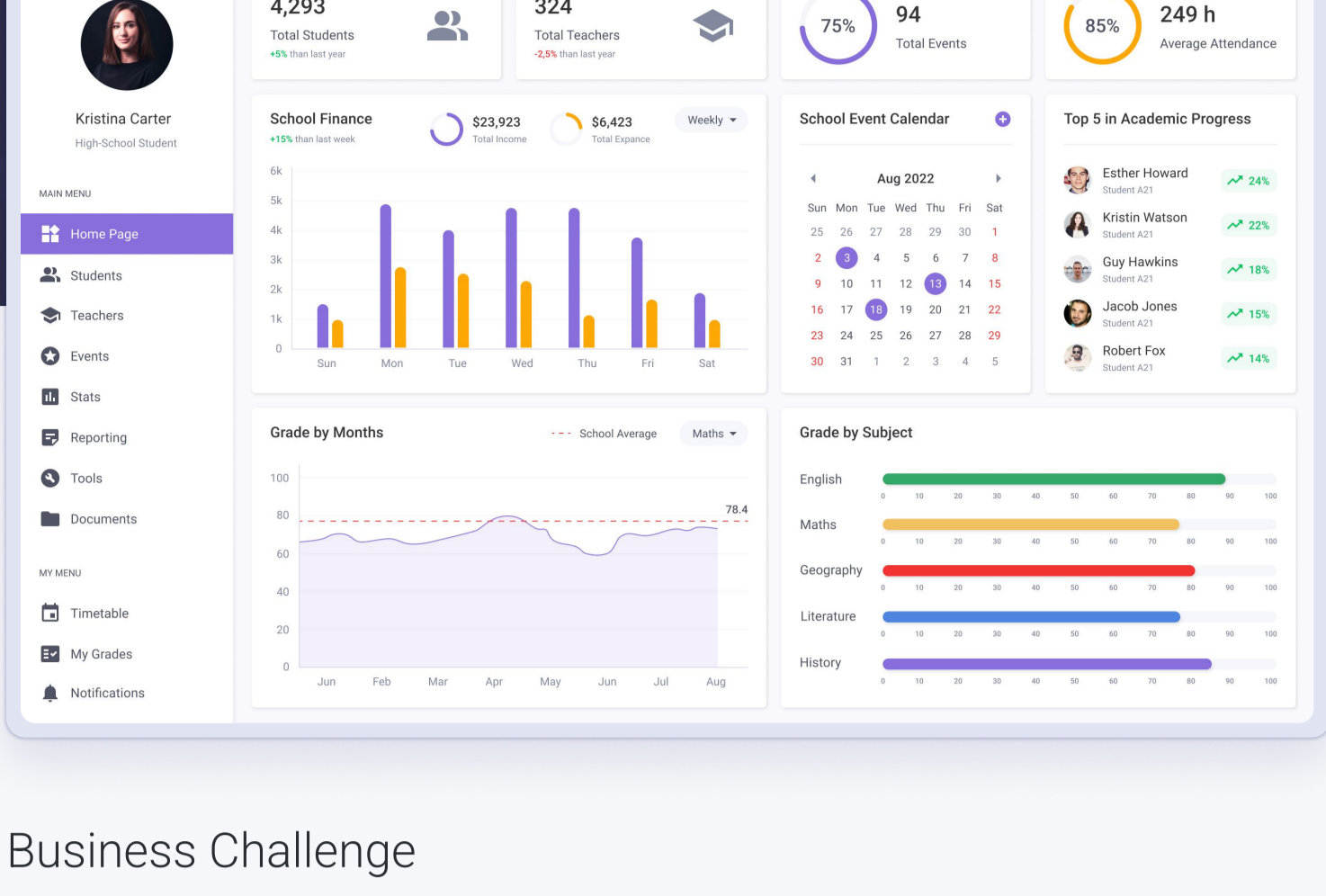


## Interactive Student Performance Tracking App

An online app for educational institutions that allows tracking student academic performance and provides users with access to interactive grading dashboards. Teachers can review such data as the overall curriculum progress, individual average grades, attendance, grade by subject, and other details. Also, the app enables assessing the efficiency of the teaching staff.



## Business Challenge

To evaluate the effectiveness of the used teaching methodologies, educational institutions should regularly perform tracking of dozens of indicators related to the academic performance of their students. Considering the complex nature of modern education, it's barely possible to complete such a task manually. Fortunately, assessment apps allow educational institutions to monitor, visualize, and analyze the efficiency of education with ease. An approach based on data tracking and analysis helps to define if there's the need to change the used studying programs for reaching better academic results.

Our company was asked to develop an online application for efficient tracking of student performance data. The app should allow reviewing and editing the list of students containing different data, including name, contact info, and average grade. By request, users should get access to detailed stats of a particular learner, such as grade per specific subject. Also, the app should allow tracking the teachers their working hours, attendance by students, and other parameters.

## Solution

After analyzing the requirements of our client, our development team has built a full-featured online app for tracking performance data. Teachers can use this application to get access to the full **list of students** and check their names, email addresses, average grades, curriculum progress, and attendance. The list can be sorted by any of these parameters. This feature of the app can be used to determine those learners that have the lowest grades. Then, such a student can be quickly contacted via email to find out the reasons for poor academic performance and schedule a consultation if needed.

The application also provides access to the **profile page** of a particular student. This page contains vital data, such as name, date of birth, average grade, address, email, disciplines studied, and other records. All this info can be modified with a couple of clicks.

The system allows getting access to data related to teachers as well. The app users can review the list of teaching staff that provides and know their name, email, department, and current status (busy or active). Each record can be also edited.

Our [Webix development team](#) has implemented **data visualization** features that allow representing info on students performance in the form of an interactive dashboard. This approach significantly improves the effectiveness of tracking student academic progress. The users of the app can select a particular student from the list and get instant access to the required info, including individual average grade, attendance, grade by subject, and current curriculum progress.

Besides, the application can be used for teacher efficiency tracking. In this mode, it can visualize the important data, like working hours, attendance by students, and average test score.

The app allows generating **reports** and exporting them to Excel, PDF, and other formats. Smart **alerts** and **notifications** allow being aware of important events. For example, you can configure the system to send you a warning if the average grade of a particular student falls below a given value.

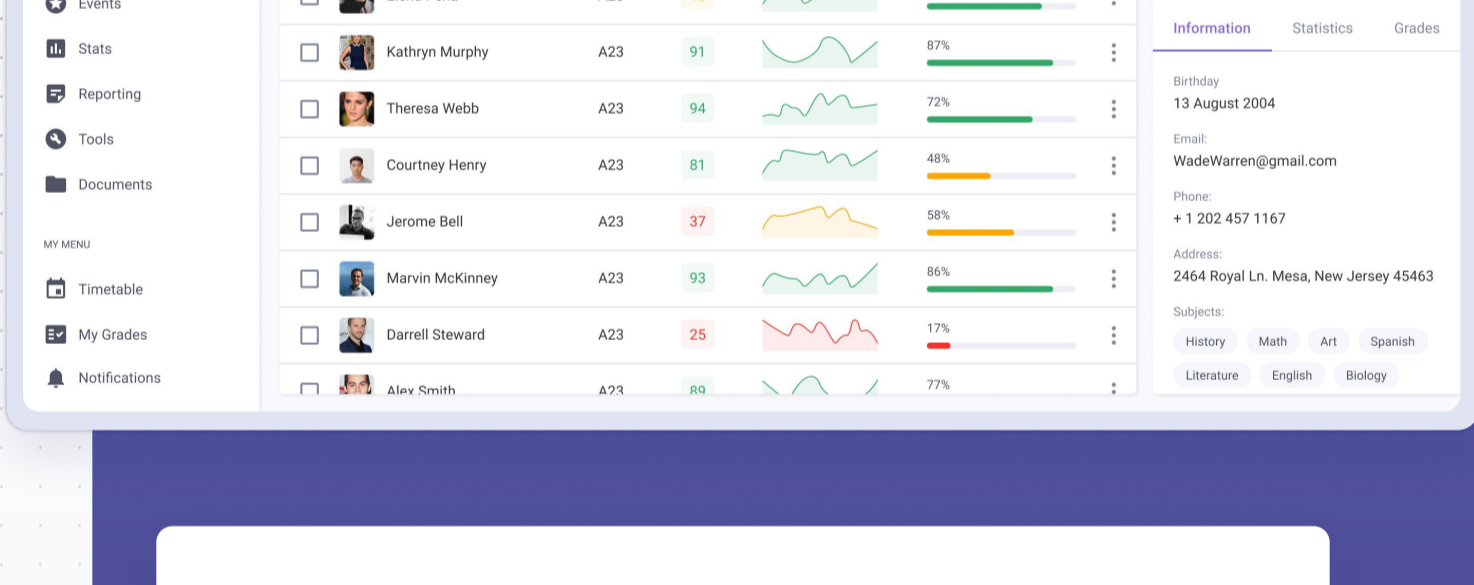
**Mobile support** enables the use of this tracking app on smartphones and tablets. **Document upload** and **file sharing** can simplify the work of your team and provide teachers with the possibility to share and discuss their view on curriculum innovations. **Progress evaluation** and **score system** can help teachers to identify learners who demonstrate the best academic success and encourage them.

## Implemented Components

In order to simplify the development process and achieve a successful outcome that will suit the customer's needs, we implemented several ready-made [Webix widgets](#).

First of all, we integrated the [User Manager](#) that brought simplicity to the assignment of various permissions to users and overall user management process. The teachers are able to see all the needed data on students in the Students tab and find a certain individual or group/class to plan further class activities or check the academic progress of students.

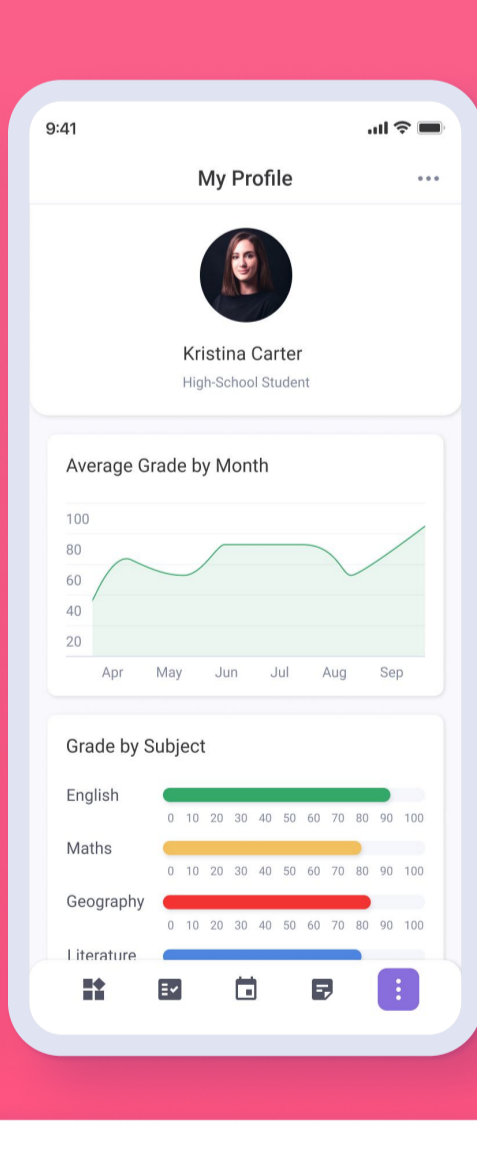
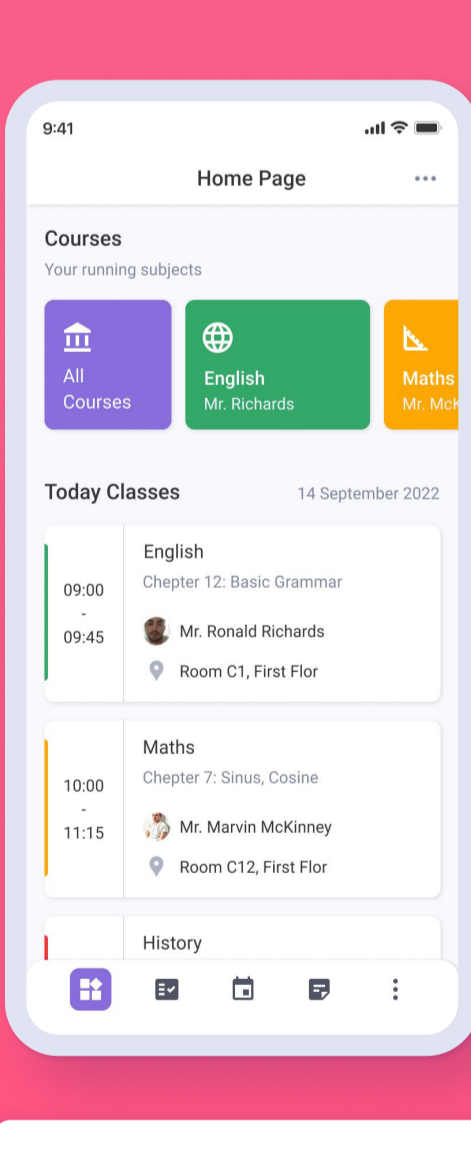
The [Report Manager](#) turned out to be a good addition to the application, as now teachers are able to do just a couple of clicks to see the full report on a student's performance that they are interested in. And then, download them to save on their device. Also, the [Document Manager](#) helps teachers to have all relevant documentation in one place in order to share with other teachers or add new files and find them easily later.



## Project in Figures

**12+**  
Month  
Duration

**1500+**  
Estimated  
man-hours



## Applied Technologies



## Result

Our kristina has rich experience in [Node JS development](#) and other modern technologies. It allowed us to design and build an advanced online app for efficient tracking of students' and teachers' performance data. The app provides easy access to the list of students and teaching staff and allows editing this info with ease.

Modern data visualization tools allowed our developers to create an interactive dashboard that represents complex data in an easy-to-understand way. With its help, the users of the app can get a clear understanding of the current academic results of a specific student. Also, the dashboard allows tracking the performance of a particular teacher.

As a result, the student tracking app we developed enables users to:

- ✓ review and edit the list of teachers and students;
- ✓ get access to the dashboard for easy student progress tracking;
- ✓ create and share reports via the web or mobile app.

## Customer

A large educational institution from the EU that wanted to replace legacy software for tracking data on students and teachers performance with a modern and full-featured app.

To learn how custom-made apps can help your educational institution, you can receive a free consultation from our specialists.

**Your questions and requests are always welcome!**