# Tokened

FBLA Coding and Programming 22-23

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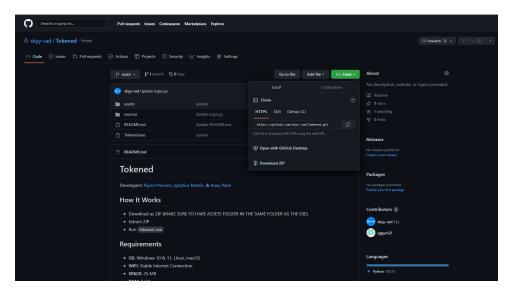
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# What is Tokened?

Tokened is an application that tracks student engagement in school events and incentivizes improvement in student attendance at school events using various rewards. To start using Tokened, one has to create their own account using their email, which students will use to log in and access the rest of the application. Tokened helps schools track and increase student involvement without schools having to manually track which students attend a certain event. When signing up for the application, students are required to choose their school, which is used to filter the application so that they do not view data from accounts registered at different schools. Students input events that they attend, and are rewarded with a certain amount of points for every event. Also, students give feedback on the events that they attend, which the school can use to plan better events in the future. These points add up over the course of a quarter, and the student with the most points receives a reward. Every student also receives a reward based on how many points they have accumulated throughout the quarter. Also, the application contains a leaderboard, filtered by their school, so that they can view the progress of other students at their school, and compete with them. Students are also shown upcoming events on their dashboard, so they can plan to attend future events. At the end of every quarter, a report can be generated in the application which displays the name. Lastly, the application also has a help page for any questions.

# **How to Download**

- 1. First, go to the GitHub page using the URL: <a href="https://github.com/skyy-rad/Tokened">https://github.com/skyy-rad/Tokened</a>
- 2. Then, click the green "Code" button to open the menu.



- 3. From the menu, select the "Download ZIP" option.
- 4. Once the ZIP is downloaded, click on the folder in File Explorer and select "Extract All".
- Once the files are extracted, locate the folder with the extracted files and find the "Tokened" application.
- 6. Double-click the application to run it.
- 7. If you get a warning message, click "More Info"
- 8. Then, select the "Run Anyway" option





# System Requirements

### OS

• Windows 10 or Windows 11

### Wi-Fi

- A stable connection
  - The connection to the *MongoDB* database may be blocked by the Wi-Fi provider.
     If this is the case, try using a private network, to allow connection to the database.

## Space

• 25 MB

### **RAM**

Minimum 2 GB

# Version History

#### Version 1.1

In this version, we set up the window for the application as well as a login page and sign-up page that required a name, email, and password to create an account. We also set up our external database (MongoDB). Essentially, this version is the framework for the rest of the application, and future versions will have more pages that serve different purposes. We also added the environment page to store any files we use throughout the program.

#### Version 1.2

- Changed the sign-up page to require first name, last name, grade, email, school, and password.
- Added a confirm password feature on the sign-up page.
- Added a forgot password button on the login screen for students that need to reset passwords.
- Added dashboard page with auto-updating leaderboard, and menu button to access settings.
- The settings menu has a change password feature, which also requires the student to confirm the new password.
- Added text at the top of the dashboard screen that welcomes the student using their first name.
- Added points display to the top right of the dashboard that shows how many points a student has accumulated.

#### Version 1.3

- Added the Events page.
- Added an event log for past events that the student has attended.
- Added the option for the student to add events to their event log.

#### Version 1.4

- Added help page.
  - Added link to the documentation
  - Added Contact Us.
  - Added a feature for students to change their current grade and school.

#### Version 1.5

- Added a switch option on the sign-up page to choose teacher account
- Created Account Settings Page

- Moved "Change Password" and "Change Information" to Account Settings Page
- Updated settings menu on the right side
- Added teacher dashboard and updated event page

## How to Use

### Login

- 1. If you have not created an account, use the sign-up button to navigate to the sign-up page.
- 2. If you have an account, enter your email and password into the proper entry fields.
- 3. Then, click the log-in button.
- 4. If you have forgotten your password, click the forgot password button, which will email your account for you to reset your password.
  - a. Can change your password in the account settings page



### Sign Up

- 1. Enter your first name, last name, grade, and school into the appropriate fields.
  - a. If you are a teacher, choose the teacher option in the grade drop-down.
- 2. Enter your email (valid email) and password into the appropriate fields.
- 3. Confirm your password in the password confirmation field.
- 4. If you are a teacher, click on the Teacher toggle
  - For testing the application, use 0000 for the teacher confirmation code. (In real applications, the confirmation code will be randomly generated to verify teacher accounts.)
- 5. Click on the "Create" button

### Student Dashboard

1. The dashboard will have a leaderboard, showing you the top 5 students with the most points in your school.

- 2. To go to the events page, click on the "Events" button.
- 3. To open the settings menu, click the three-dots button. This will allow you to reset your password, access the help screen, or log out.
- 4. To generate a quarterly report, click on the report button, near the bottom right of the window. To return to the dashboard, click the arrow in the top-left of the window.
- 5. The dashboard also shows you the current number of points you currently have and upcoming events that you may attend.

#### Teacher Dashboard

- 1. The dashboard will have a added events option on the left and a added events log on the right
- 2. Upcoming events will be shown on the bottom
  - a. Based on events that are after today's date (adapts to current date)
- 3. Once a teacher adds a event, the student from the same school can go on their add event page (in the student dashboard, accessed by student logging in) and add the events they participated in
  - a. Can only add events that have happened, upcoming events are shown just for a reminder
- 4. To generate a quarterly report, click on the report button, near the bottom right of the window. On the report page, click "View Reports of All" to see all students and events for the school.

### Student Event Page

- 1. To add an event, choose an event from the drop-down menu.
  - a. A teacher must have created events for you to participate in from your school, if there is none or you have already participated in all the events the teacher has added you must wait for new events to be added
- 2. Use the slider to submit feedback for the event.
- 3. Check the checkbox to ensure you are being honest about your participation
- 4. Click the blue button to add the event.
- 5. You will notice that the added event, along with past events, appears in the event log.
- 6. To return to the dashboard, click the arrow in the top-left of the window.

## Account Settings Page

- 1. If you are looking to change your school or grade, select the appropriate options from the drop-down menus, and click "Update".
  - a. Teachers cannot change their grade, but can change their school

2. If you are looking to change your password, type your current password. Then type your new password and confirm the new password in the appropriate fields.

### Help Page

- 1. To contact us for any help or questions, the resources are provided
- 2. To view the code documentation, click on the GitHub link to access the website.
- 3. To return to the dashboard, click the arrow in the top-left of the window.

# **Features**

## MongoDB Database



MongoDB is a type of database that is designed to handle unstructured or semi-structured data, such as JSON documents. It's particularly useful for storing and managing data that doesn't fit neatly into a traditional table-based relational database. We chose MongoDB because it's flexible, scalable, and easy to work with. Using the MongDB Database, we store our student and teachers account information. Even backing up the events to be able to access it from anywhere. With MongoDB Database we dynamically backup data.

### **Events Page**

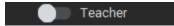
The event creating process is guite simple and efficient. The teacher will create events that students can attend and participate in and once the event passes or already passed the student can go from the student dashboard to their add events page. On the add events page, events (before today's date) created by the teacher of the same school as the student will appear and students can select and obtain points from their participation. The participation is based on an honor policy and they are ensuring they attended by clicking on the checkbox. The event page is dynamically synced through the use of the MongoDB Database.

# Password Reset \_\_\_\_\_



In case the user forgets their password, we have a forgot password option located in the login screen. By typing a valid email that is registered (synced in MongoDB Database), an email will be sent with a new temporary password which the user can use to login. Once logged in with the temporary password, the user can head to the account settings page and change their password.

## Teacher Confirmation Code



During the signup process, the user has the choice to sign up as a teacher. To ensure students don't sign up as teachers. We created unique confirmation codes that each school would receive to ensure only teachers sign up as teachers. If the wrong confirmation code is imputed, the teacher selection will be deselected.

# <u>Sources</u>

- Flaticon
  - o <a href="http://www.flaticon.com">http://www.flaticon.com</a>
- Icons8
  - o <a href="https://icons8.com/">https://icons8.com/</a>
- Pythonprogramming.net
  - o <a href="https://pythonprogramming.net/change-show-new-frame-tkinter/">https://pythonprogramming.net/change-show-new-frame-tkinter/</a>