

The SAfETy App

The “School Assessment for Environmental Typography” App

Documentation & Guide

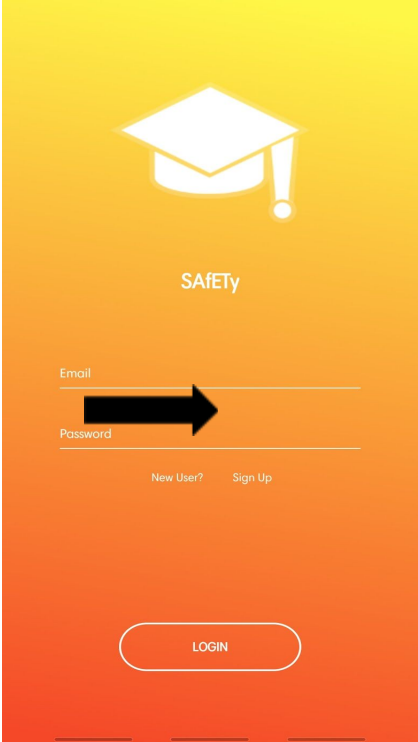
Getting Started:

The SAfETy app is an Android application that allows school administrators and staff to document areas in their school that need improvement to increase student safety.

This document shows the basic functionality of the app, as well as more advanced instructions on Amazon Web Servers (AWS).

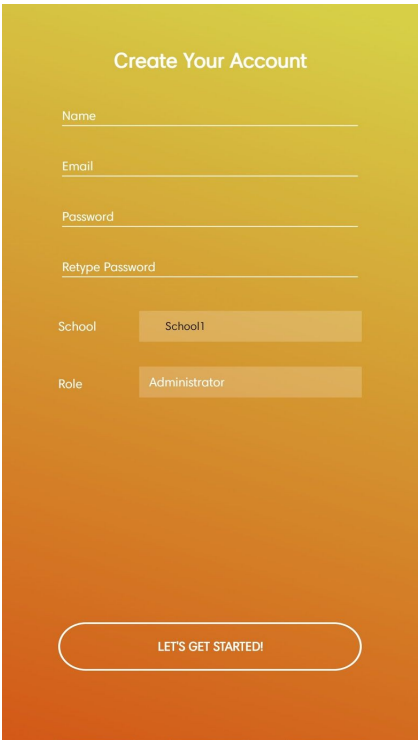
Authentication:

To make an account, tap the “Sign Up” button to begin the process.



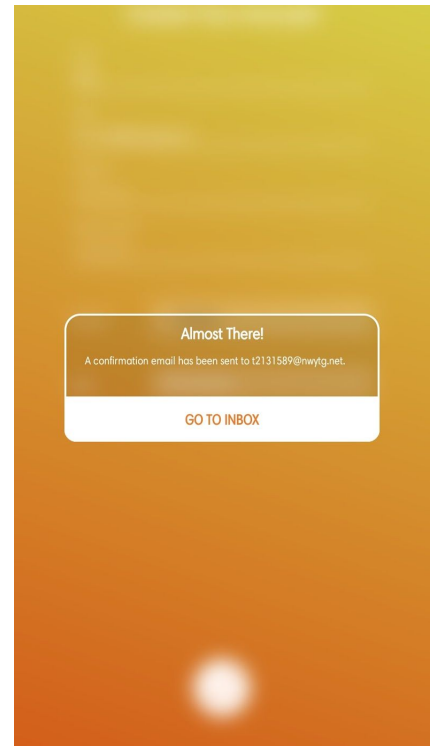
A login screen with a yellow-to-orange gradient background. At the top is a white graduation cap icon. Below it is the word "SAfETy" in a white, sans-serif font. There are two input fields: "Email" and "Password". A large black arrow points from the "Email" field to the "Password" field. Below the "Password" field are two links: "New User?" and "Sign Up". At the bottom is a white rounded rectangle button with the text "LOGIN".

You will be directed to the “Create Your Account” screen. Enter your name, email, and password. Passwords must have at least 8 characters, with at least one capital, one special character, and one number. Select school, and associated role. Lastly, tap “Let’s Get Started”.



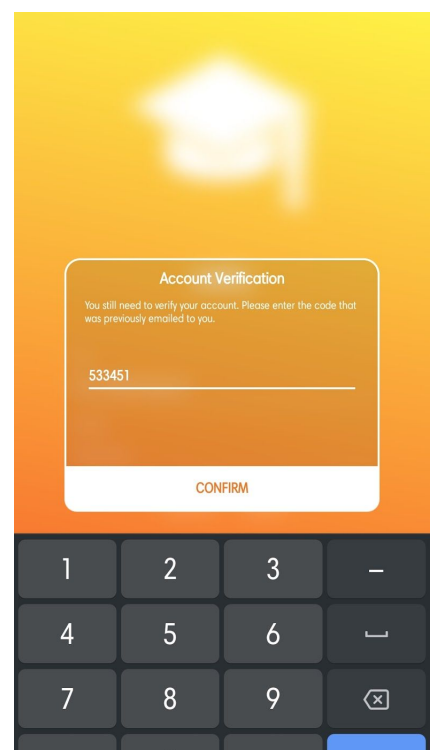
A "Create Your Account" screen with a yellow-to-orange gradient background. The title "Create Your Account" is at the top. Below it are four input fields: "Name", "Email", "Password", and "Retype Password". Below these are two dropdown menus: "School" with "School1" selected, and "Role" with "Administrator" selected. At the bottom is a white rounded rectangle button with the text "LET'S GET STARTED!".

Next, you will be sent an email containing a 6 digit code.



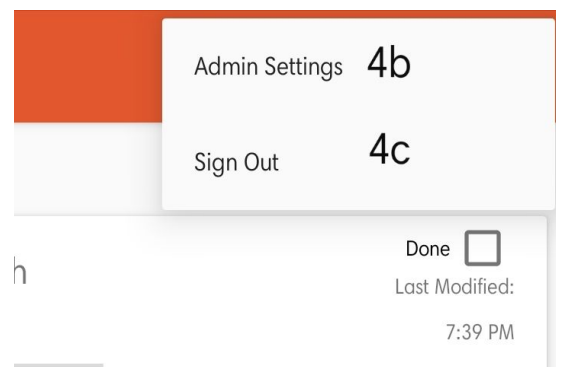
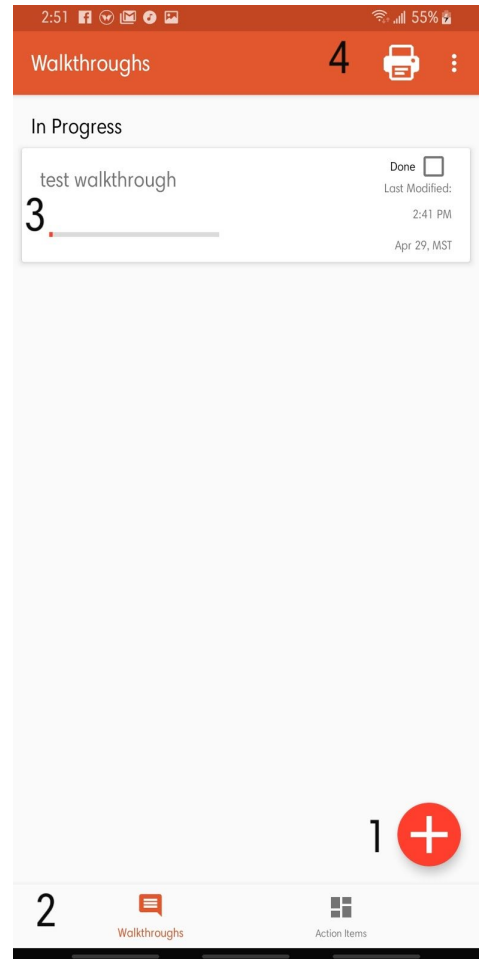
Log into the app again. You will be prompted to enter the 6 digit code that was sent to your email. Users will only need to do this once.

After this is done the user will have access to the app. If the user's selected school has walkthroughs in progress, they will download at this point.



Main Screen:

1. Add new walkthrough
2. Action Bar
3. Walkthroughs in progress
4. Print and Options menu:
 - a. Print button
 - b. Remove User
 - c. Sign Out



Creating a Walkthrough

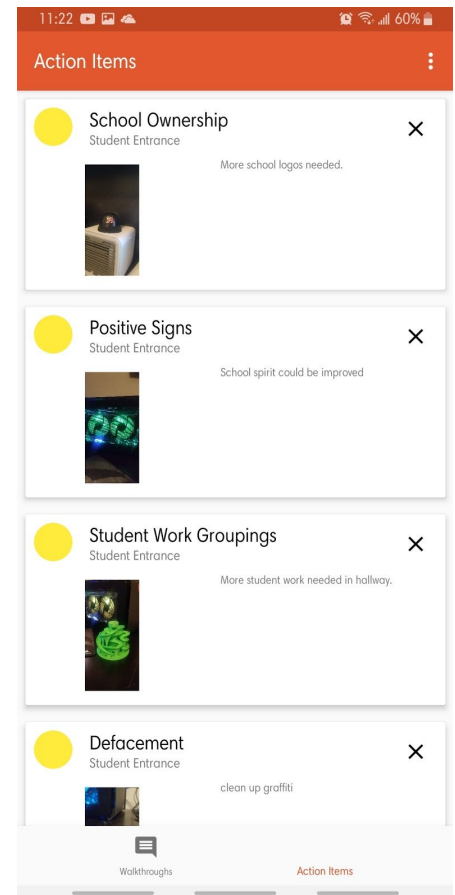
Once a walkthrough is started with the floating “+” button, the user will be presented with a list of locations. Choose the appropriate location to proceed.

The user will be presented with the question screen. Here, they can answer questions about the current status of the school and set a priority to of the issue. Tapping the photo icon allows photos to be saved. Continue to tap the ‘next’ button and enter information according to each new question. Walkthrough will automatically save once all questions are answered.

The first screenshot shows a mobile app interface with a status bar at the top displaying the time 11:43, various icons, and a battery level of 72%. Below the status bar is an orange header with the text "Sample Walkthrough". Underneath the header is a section titled "Locations" with a list of locations: Student Entrance, School Grounds, Bathrooms, Hallway, Stairwell, Cafeteria, Hotspot, Classroom 1, Classroom 2, and Classroom 3. The second screenshot shows a mobile app interface with a status bar at the top displaying the time 11:43, various icons, and a battery level of 72%. Below the status bar is an orange header with a back arrow and the text "Bathrooms". Underneath the header is a question: "Bathroom is clean and in good repair (e.g. fixtures not leaking)." with four radio button options: Strongly disagree, Disagree, Agree, and Strongly agree. Below the question is a section titled "Priority:" with three colored circles: red, yellow, and green. Underneath the priority section is a section titled "Action Plan:" with a text input field and a placeholder text "Tap to enter action plan here". Below the action plan section is a section titled "Take a Photo:" with a large gray square area containing a camera icon. At the bottom of the screen are three buttons: "BACK", "Question: 1 of 6", and "NEXT".

After walkthroughs are completed, Action Items appear in the “Action Items” tab. The action items can be edited by tapping on them.

Walkthroughs and Action Items are automatically uploaded to AWS in the background (every time the user exits the app). The next time a user from the same school logs in, the walkthroughs are downloaded to the app and they may continue walkthroughs started by other users.



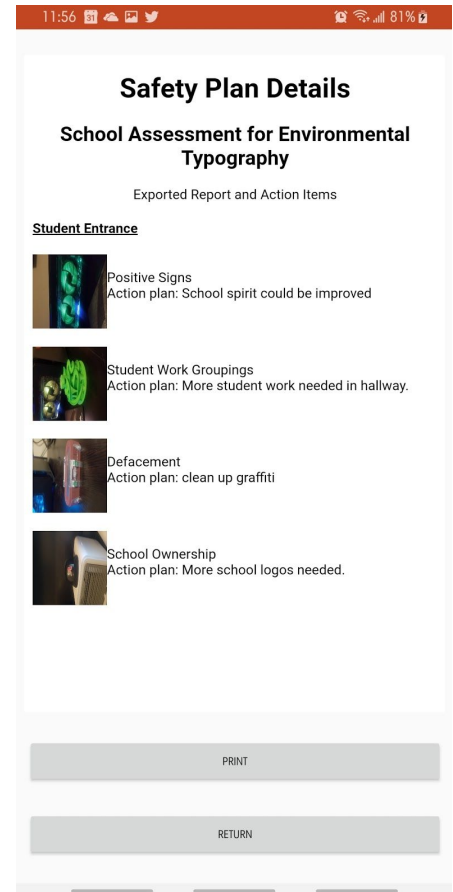
Note: Pictures are downloaded from AWS when the main screen launches. This is done to decrease loading times when logging in.

Pictures are also uploaded to AWS with the Walkthroughs. They are compressed before they are uploaded to save space on AWS and to increase the download speed.

Printing Action Plan:

Action Items can be exported to a printable format by selecting the white print icon in the top menu. The user will be presented with this menu, allowing them to print using the phone's built-in print function that will allow the user to print to any printer on the network.

This document can also be saved as a PDF.



AWS Management


Adding Schools:

Schools are added from the server. To add a school log into AWS, go to Mobile hub, then select “safety app”

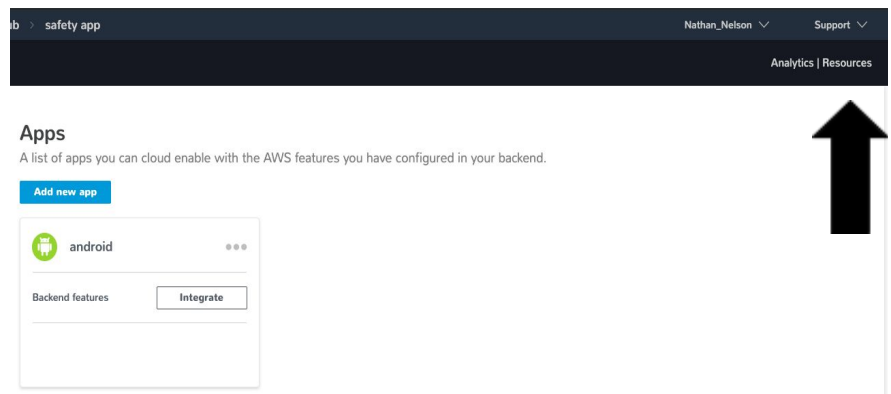
Your Projects

Have your own app? Create a project to cloud enable your app with AWS services.

[Create](#) [Import](#)

safety app	
	
REGION	CREATED
US West (Oregon)	November 28, 2018

Once “safety app” is selected, click Resources in the top right corner.



Then click the safetyapp-userfiles link as shown here:

Amazon S3 Buckets

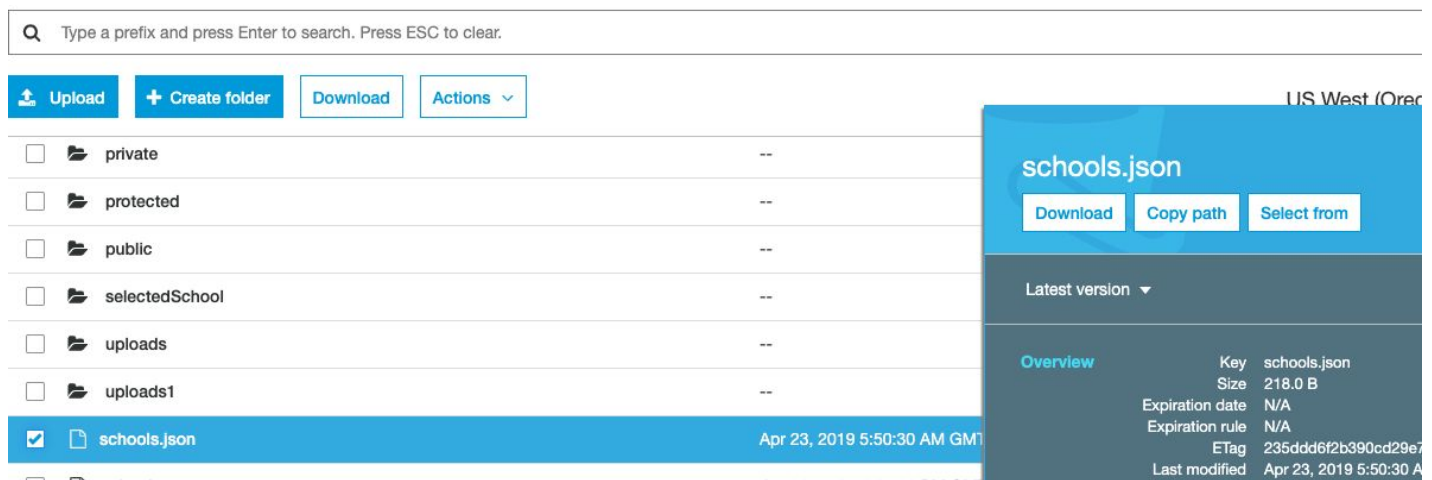
Amazon S3 allows you to store files in the cloud organized in buckets. Depending on which features you have configured, we have provisioned buckets for User Data Storage and for Hosting and Streaming.

[safetyapp-userfiles-mobilehub-2118900508](#) 

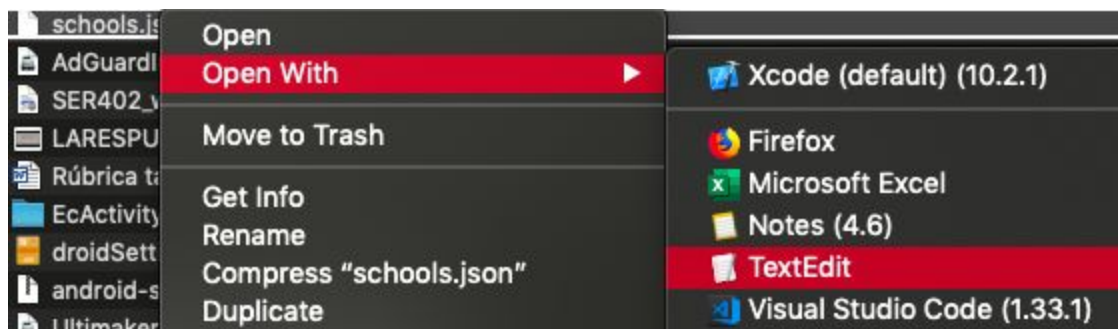
[safetyapp-deployments-mobilehub-2118900508](#) 



This is where school data is saved. Each folder is its own school. To add a school, click the “schools.json” file and select Download.



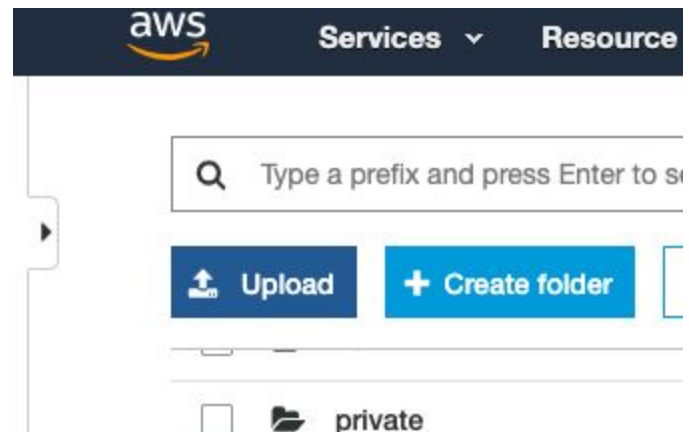
Then navigate to your downloads folder, right click “schools.json” and select “Open With” and choose TextEdit for Mac, or Notepad for Windows.



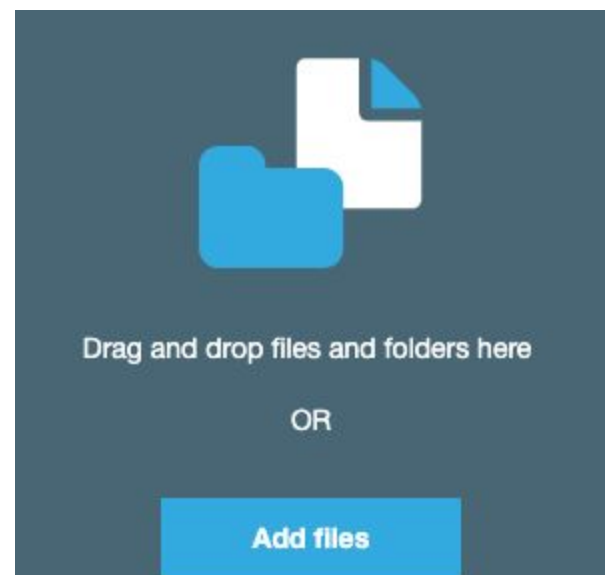
Once open in TextEdit or Notepad add a new school by putting it in the list. Remember to insert everything highlighted, exactly. “School 5” and “Sample School” can be any value. In this example, School 5 was added to the list. After the new school is added save the file.

```
{
  "School1" :
  {
    "name" : "ASU-West"
  },
  "School2" :
  {
    "name" : "UAK-Anchorage"
  },
  "School3" :
  {
    "name" : "Toreros"
  },
  "School4" :
  {
    "name" : "CGCC"
  },
  "School 5":
  {
    "name" : "Sample School"
  }
}
```

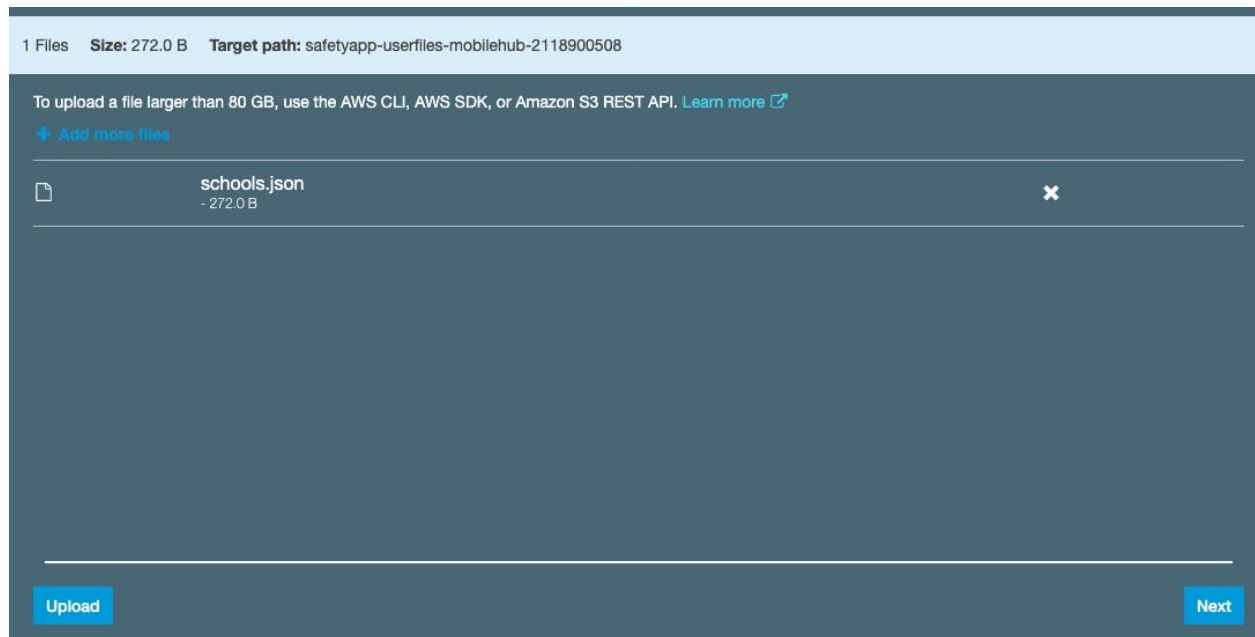
Navigate back to AWS in your browser and click “upload” to provide the server with the file you just edited.



Click add files, or drag and drop the newly saved “schools.json” to add the new file to AWS.



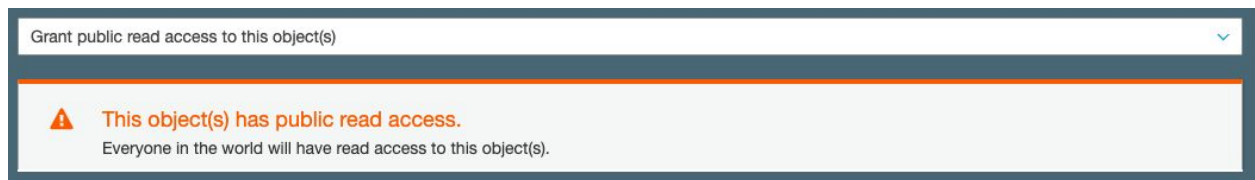
Once this is done you should see this screen:



Click next to continue.

On the next screen, select “Grant public read access to this object” from the drop down menu.

You will receive this warning, however, public access is needed to populate the list in the app.



Important: If this setting is not changed, the app will not allow anyone to add new users to the database.

After this click next.

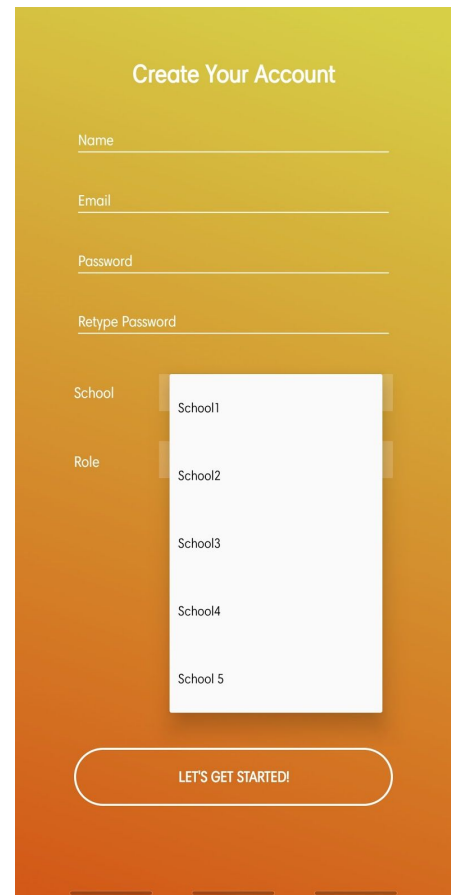
Keep the storage class as standard, and click next again.

Storage class	Designed for	Availability Zones	Min storage duration	Min billable object size	Monitoring and automation fees	Retrieval fees
<input type="radio"/> Standard	Frequently accessed data	≥ 3	-	-	-	-

Finally click upload and the new school will be added.

Check to make sure the school was added by opening the app and clicking “New Account”. School 5 was successfully added to the list.

This is all that needs to be done to add a school to the app. Once added, the app will automatically generate the necessary folders and files once a user logs in with the new school selected.



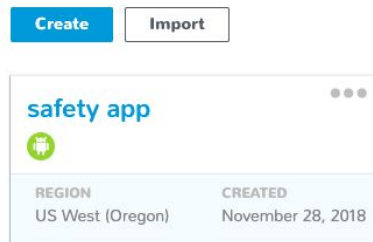
The image shows a mobile app interface for creating a new account. The background is a gradient of yellow and orange. At the top, the text "Create Your Account" is displayed. Below it are five input fields: "Name", "Email", "Password", "Retype Password", and "School". The "School" field is currently open, showing a list of five options: "School1", "School2", "School3", "School4", and "School5". Below the "School" field is a "Role" field. At the bottom of the form is a large, rounded button with the text "LET'S GET STARTED!".

Troubleshooting Walkthroughs:

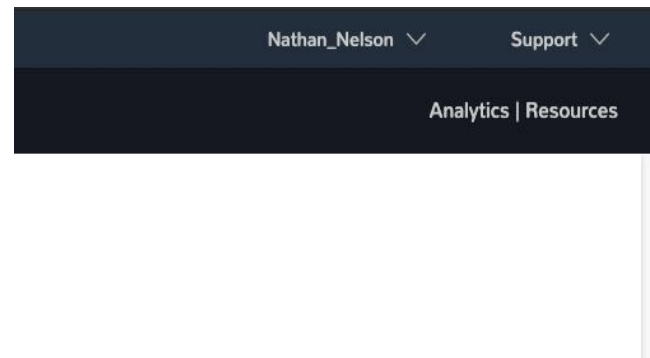
If Schools are having Issues saving walkthroughs the Database may need to be reset. To do this repeat the steps to get to the online files. Log on to AWS, go to Mobile Hub, then click “safety app”

Your Projects

Have your own app? Create a project to cloud enable your app with AWS services.



Then select “Resources in the top right corner.



After that, select the “safetyapp-userfiles” Bucket.



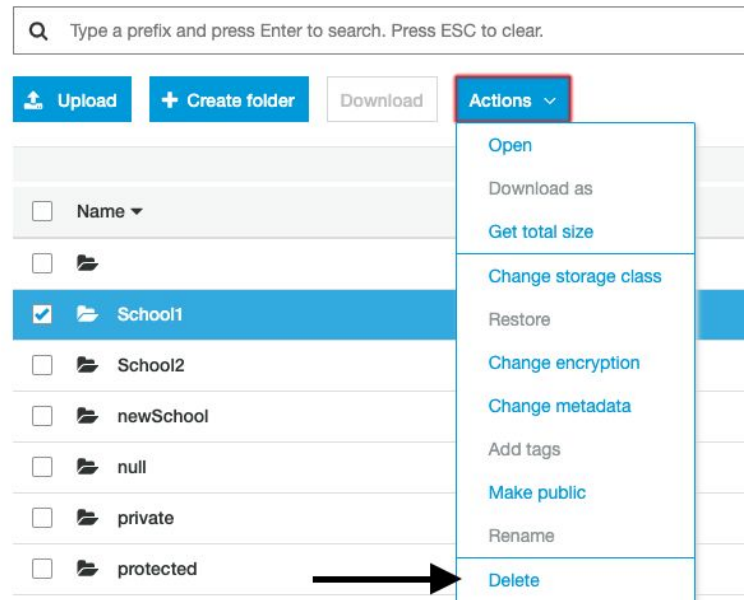
Amazon S3 Buckets

Amazon S3 allows you to store files in the cloud organized in buckets. Depending on which features you have configured, we have provisioned buckets for User Data Storage and for Hosting and Streaming.

[safetyapp-userfiles-mobilehub-2118900508](#)

[safetyapp-deployments-mobilehub-2118900508](#)

After this select the school folder that is causing issues and delete the folder by selecting “Actions -> Delete”



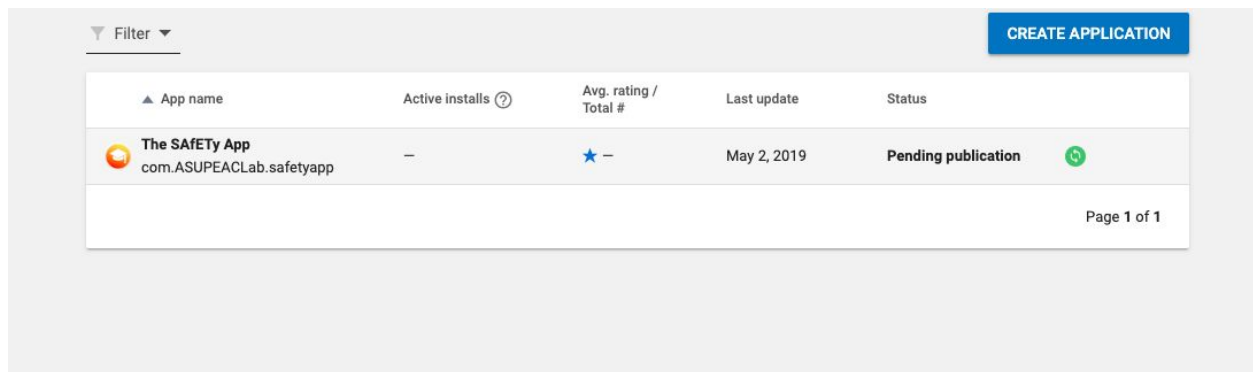
This will delete the schools walkthroughs so make sure the action items are complete or exported before deleting

Don't worry about adding the folders back. The app will automatically make them again when a new walkthrough is uploaded.

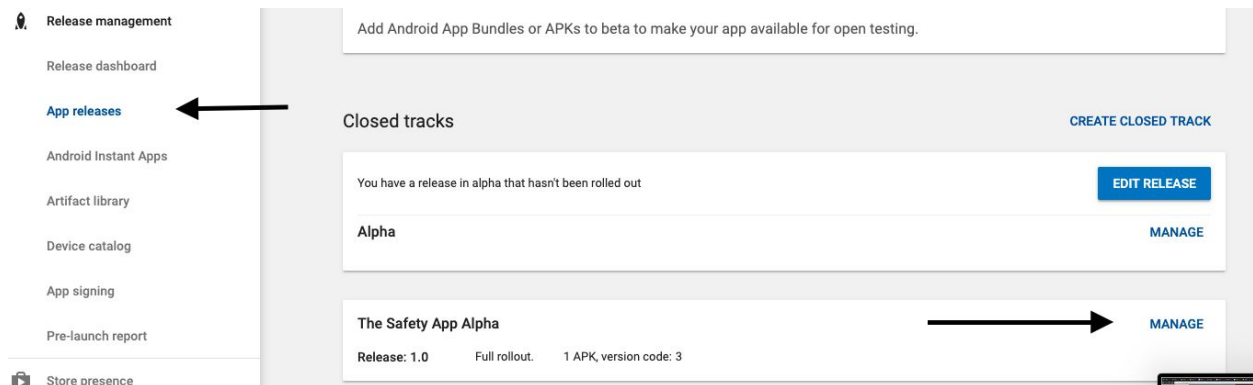
Downloading the App:

In order to give access to the app, an email address must be provided. To add an email to the closed Alpha go to the [Google Play Console](#).

Launch the console while signed into peaclabasu@gmail.com. Then Select “ The SAfETy App”

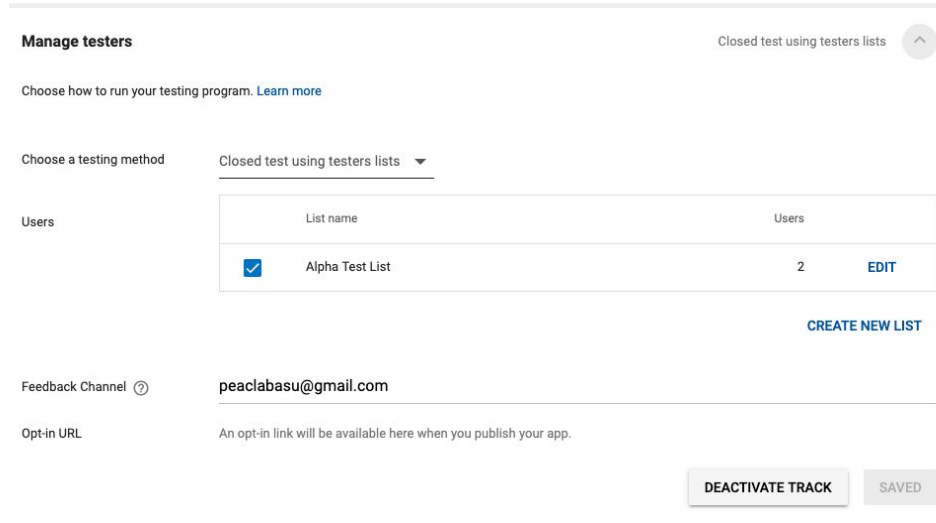


Then Proceed to “ Release Management” then click App releases. Click Manage on “The Safety App Alpha” under Closed tracks.



Then Select Manage testers to edit the list of people who have access to the app.

Enter the email of the person who will have access to the app.



Manage testers Closed test using testers lists

Choose how to run your testing program. [Learn more](#)

Choose a testing method Closed test using testers lists

Users

	List name	Users	
<input checked="" type="checkbox"/>	Alpha Test List	2	EDIT

[CREATE NEW LIST](#)

Feedback Channel ?

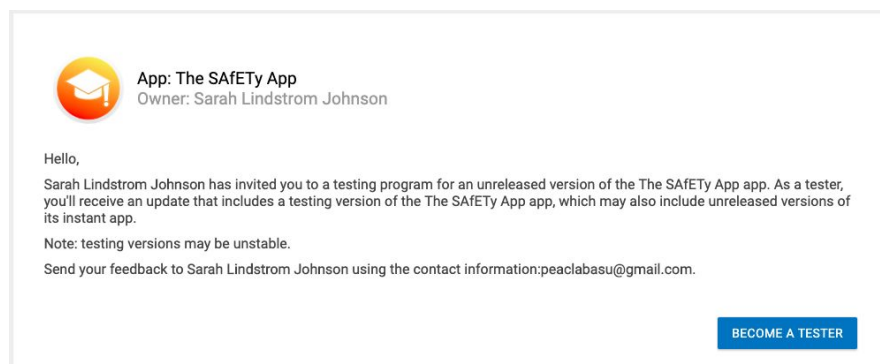
Opt-in URL

[DEACTIVATE TRACK](#) [SAVED](#)

Unfortunately Google will not automatically send them a link to download the app. The need to sign up using this link:

<https://play.google.com/apps/testing/com.ASUPEACLab.safetyapp>

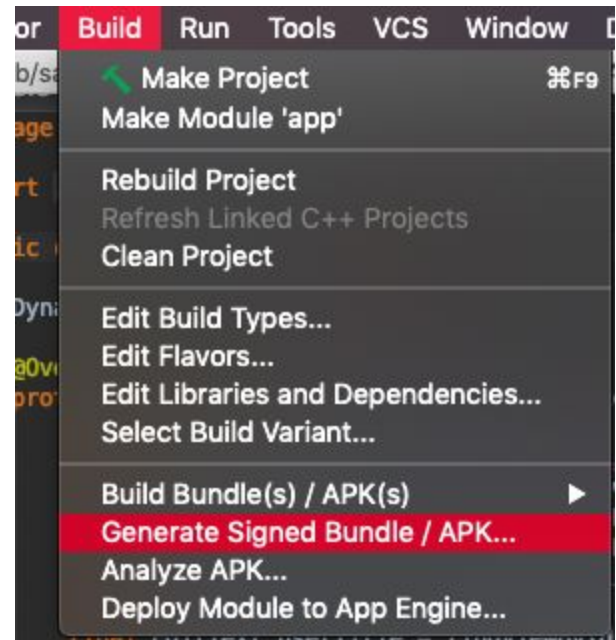
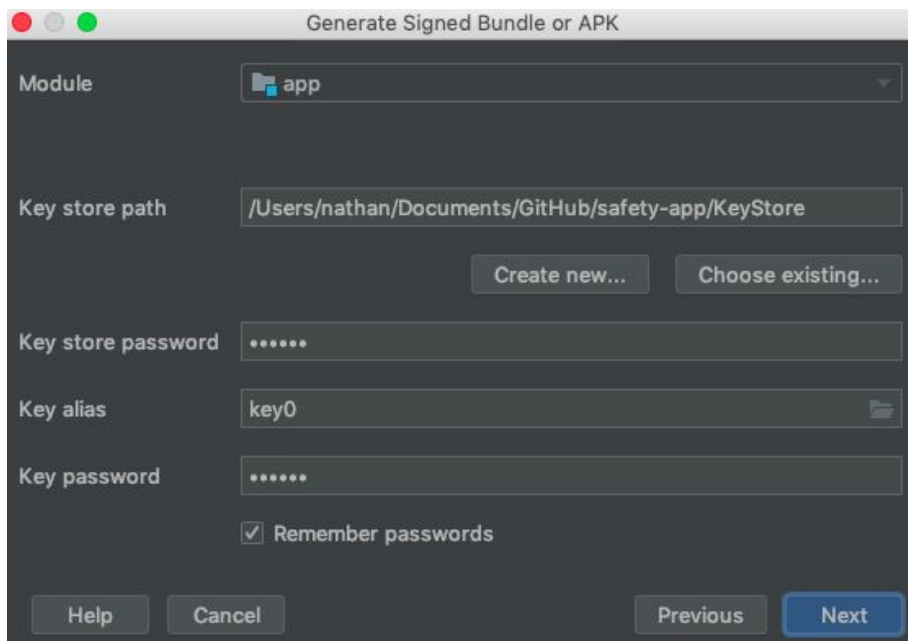
Once they click the link and log into the same gmail that was provided earlier, they will be able to “Become a Tester” and download the app.



Publishing the App:

When future revisions to the app are made, a Signed key will be needed to publish updates. To publish a new version, go to Android Studio, then click Build ->

“Generate signed bundle / APK” This file is located in the Root GitHub Repository. Once this is done you will need a key to publish the app. This key file is called “KeyStore” and is located in the root directory of the project The password for the key is “safety”



TO DO:

- Add Custom locations and Questions
- Ability to remove unwanted completed walkthroughs from history
- Add method to delete Database from AWS for a fresh start.
- Add password reset functionality with AWS
- Finish all async await functions with callbacks for downloading database.
- Implement better method to add schools to the app

KNOWN ISSUES:

- After extensive testing we found that some internet connections would not allow the walkthroughs to download. We noticed this specifically on ASU's WiFi network. If schools are having issues with walkthroughs updating on their device, try using a cellular connection until a fix can be found.