runlinc Online Project A4: Storytelling App (runlinc Online Version)

Contents

This project uses the runlinc web app form which can be found here:
https://runlinc.com/Test/runlinc_Phone_AI_Voice_Story_App_FORM4.html

Make sure to right-click the link and click 'open in new tab'.

This project does not require a runlinc Wi-Fi Inventors' Kit.

Introduction

Problem

We want to make a simple phone app to tell a story. We want it to utilise runlinc's ability to integrate STEM, AI and IoT into projects.

Background

Storytelling is important as it enables us to pass information on to other people. runlinc can be used for STEM, AI and IoT. We want our storytelling app to use all three of these applications.

Ideas

We will be running this app on a phone. What kind of sensors could we use? What could we have the web app do? How can we tell the story?

Plan

We will use the runlinc web app form to generate our app. This will create an app which makes use of the accelerometer in the phone (STEM), send an email (IoT), and uses the browser's text to speech synthesis (AI).

Example App

So you can better understand what we are going to be making, we have an example app which Krishna has made. Open the browser on your phone, and type in the following link: https://runlinc.com/Test/krishna.html.

Figure 1 Krishna's web app

Enter your email in the box provided and tap 'Start'. This will start a tone. Face your phone towards you and start tilting it back. You should notice that the tone changes pitch. When the phone is parallel to the ground the web app will start reading out a message (make sure your sound is on).

Check the email address that you entered in the box and you will find an email from runlinc with a message, a photo, and some info about runlinc and STEMSEL.

This is the type of app you will be creating, just with your own photos and messages.

If you're having trouble getting the app to work, try checking the following settings. First, make sure your sound is up high enough to be able to hear it. Next check if the browser has JavaScript enabled. Select 'settings -> site settings', and make sure JavaScript is allowed. If it is still not working check that the following settings are enabled on your phone; location services (in privacy settings), GPS, orientation access, and rotation.

Create the Web App

Your app can be created with our web app form on any device you have, then you will be given a link which you will need to use to open the app on your phone.

First of all, we need to open the runlinc web app form. Make sure to right-click on the link and select 'open in new tab' so this document stays open. Below is the form that will open.

Figure 2 runlinc web app form

Work through this form, inputting your name, email address, and phone number. Then the form asks you for your favourite story. This can be anything you like. It will appear on the app underneath an image you will choose.

Full Name

E-mail

Phone Number

Your favourite story in a few words (this will appear as text on your phone)

Figure 3 details and story input boxes

Up next it asks for a voice message. This message will be spoken by the browser's text to speech. Again, this can be anything you like!

Voice Message (text message will be converted to voice)

Figure 4 voice message input box

The final message is an e-mail message. This will be the text in the email that is sent to the user.

Email Message

Figure 5 email message input box

Now we need to add the two images. The first will be displayed on the web app itself, and the second will be included in the email sent to the users.

Link to photo on front page

Link to photo in email

Figure 6 image input boxes

To attach the images, we need to click 'Upload your photo here' at the top of the instructions. The following popup window will open.
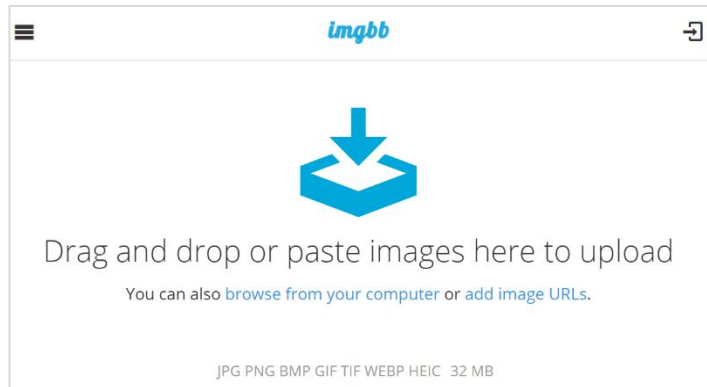

Figure 7 imgbb upload popup

If you know the URL of the image you want to use you can click on 'add image URLs', otherwise click 'browse from your computer' if the image you want to use is on your computer. Once you have selected your image, click 'upload'.
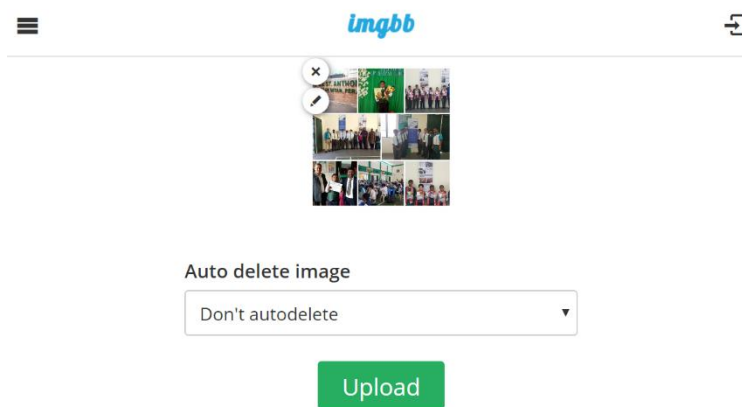

Figure 8 image selected

This will upload your image to the internet, where it can be accessed by the web app. Once the upload is complete, make sure you have 'HTML full linked' selected from the drop-down box, then click on copy, to the right of the code.
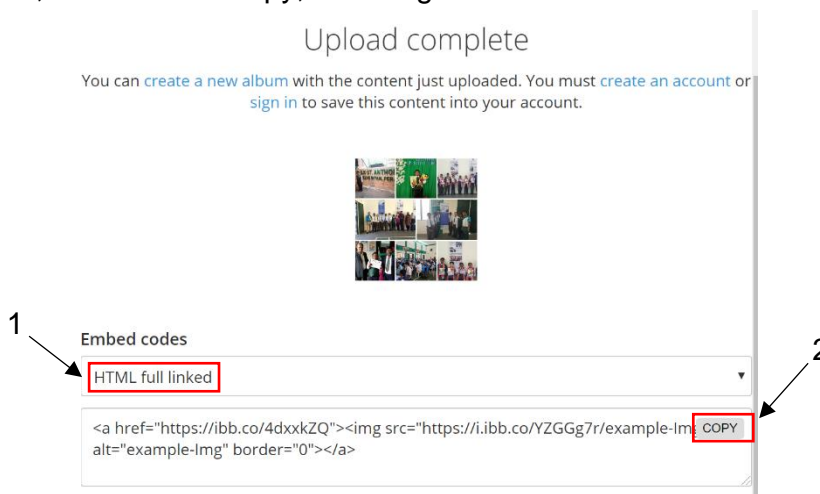

Figure 9 image embed code from imgbb

Once you have clicked 'copy' you can close the popup window and paste the code into the image input box as follows. (It won't be exactly the same code, as you will be using a different image).

Link to photo on front page

```
<a href="https://ibb.co/4dxxkZQ"><img src="https://i.ibb.co/YZGGg7r/example-Img.jpg" alt="example-Img" border="0"></a>
```

Figure 10 image code in input box

Repeat this same process for the image you want to be sent in your e-mail. Now you can press the 'Submit' button at the bottom of the page.

The web app will open in a new tab; however, we can't experience the full functionality as it requires an accelerometer which most computer's don't have. Your phone probably does have one though, so open a browser on your phone and type in the URL which you will find in the search bar at the top of your browser.

It will be in the form: runlinc.com/Test/UncheckWebApp/**Name**.html with 'Name' replaced with the name you entered into the form (including any capital letters, but no spaces).
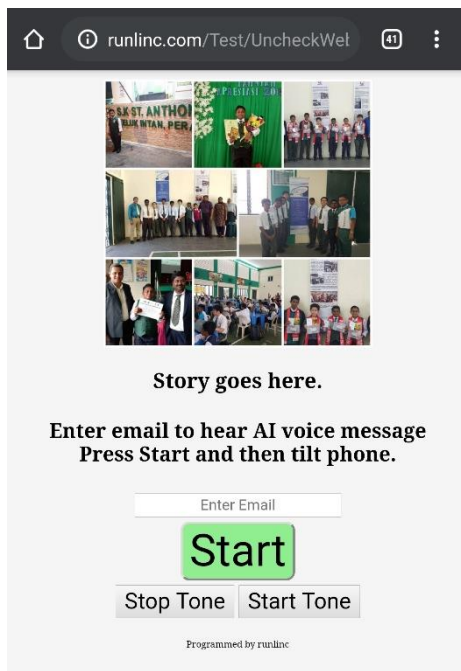

Figure 11 final runlinc web app

Enter an email address in the input box and press the start button. The page will play a tone which will change pitch as you tilt your phone backwards. When the phone is level with thr ground the web app will play your voice message.

It will also send an email to the address you just entered with your email message, and image.

Summary

runlinc can be used for many applications including STEM, AI and IoT. It can be used to easily create impressive web pages.