

User Manual

The CT Explored: Guided Tours application is designed to provide an interactive and immersive tour experience. Users can explore various locations, access detailed information about points of interest (POIs), and engage with social media features. The application aims to enhance cultural and historical awareness by integrating user-friendly navigation, multimedia content, and interactive leaderboards.

System Requirements

- **Android:** Requires Android 8.0 or later.
- **iOS:** Requires iOS 13.0 or later.
- **Internet Connection:** Required for accessing location-based services and social media features.
- **Device Storage:** Minimum of 200MB free space recommended for smooth operation.

Installation and Deployment

Pre-Deployment Setup

1. Log in to the Expo Application Services (EAS) account using: [eas login](#)
2. Ensure all dependencies are installed and updated before proceeding with the build.

Android Installation

1. Build the latest version of the app: [eas build --platform android](#)

```
PS C:\Users\saifr\Documents\Code\CTExplored-TechBallers> eas build --platform android
Resolved "production" environment for the build. Learn more: https://docs.expo.dev/eas/environment-variables/#setting-the-environment-for-your-builds
No environment variables with visibility "Plain text" and "Sensitive" found for the "production" environment on EAS.

android.versionCode field in app config is ignored when version source is set to remote, but this value will still be in the manifest available via ex
✓ Using remote Android credentials (Expo server)
✓ Using Keystore from configuration: Build Credentials LsjQ07drjk (default)

Compressing project files and uploading to EAS Build. Learn more: https://expo.fyi/eas-build-archive
✓ Uploaded to EAS
✓ Computed project fingerprint

Build details: https://expo.dev/accounts/ctexploreddev/projects/CTExploredGuidedTours/builds/4fd3001b-e2a4-43f0-a4de-c60aee9cd22d

Waiting for build to complete. You can press Ctrl+C to exit.
Build queued...
```

2. Google Play Store requires a Google Service Account for submission. Follow the steps:
 - a. Create a service account and obtain a JSON key file outlined [here](#).
 - b. Update the eas.json file with the correct serviceAccountPath variable.
 - c. Update the version and the version code in the app.json file so it is different from last submission, or an error will occur.

3. Submit the build for review: `eas submit --platform android`

```
PS C:\Users\saifr\Documents\Code\CTExplored-TechBallers> eas submit --platform android

✓ What would you like to submit? » Select a build from EAS
? Which build would you like to submit? » - Use arrow-keys. Return to submit.
> - ID: 4fd3001b-e2a4-43f0-a4de-c60aee9cd22d (3 minutes ago)
Profile: production
Commit: aa2ccc7 "Fixed helpbutton adjusting its Zindex and elevation.."
Status: finished
- ID: 6e737a47-622a-46d9-ad51-a74fc17bdb17 (1 day ago)
- ID: 51e519ed-1711-4f63-b24f-0a9635bcd432 (3 days ago)
- ID: c4b50d91-43b4-43ef-898f-b8ea09fe0e12 (3 months ago)
- None of the above (select another option)
```

Choose ‘Select a build from EAS’, and choose an android build you wish to submit.

4. Log in to the Google Play Console, select the app, and select ‘Releases Overview’.
5. Click the arrow to the right on your release.

Latest releases <small>?</small>			
Release	Latest version	Track	Release status
0.1.45	5	Internal testing	<input checked="" type="checkbox"/> Available to internal testers Full rollout
-	-	Production	Draft

6. Add testers via the ‘Internal Testing’ and share the testing link.

Internal testing

Create and manage internal testing releases to make your app available to up to 100 internal testers. [Learn more](#)

Track summary

Active · Latest release: 0.1.45 · Temporary app name 'com.ctexploreddev.CTExploredGuidedTours (unreviewed)' ?

Releases	Testers

Testers

Up to 100 testers can join your internal tests. You can choose more than 100 testers, but only the first 100 to join will be successful.

Testers	List name	Users
<input checked="" type="checkbox"/> Testers		2 →

[Create email list](#)

7. Ensure that Google Play policies regarding permissions and access are met before deployment.

IOS Installation

1. Log in to the Apple Developer account.
2. Build the latest version of the app using: Eas build --platform ios

```
PS C:\GitHub\CTExplored-TechBallers> eas build --platform ios
★ eas-cli@15.0.15 is now available.
To upgrade, run npm install -g eas-cli.
Proceeding with outdated version.

We detected that you are building for the "store" distribution. Resolving the environment for environment variables used during the build to "production". Some environment variables are being resolved automatically.
No environment variables with visibility "Plain text" and "Sensitive" found for the "production" environment on EAS servers.

✓ Using remote iOS credentials (Expo server)

If you provide your Apple account credentials we will be able to generate all necessary build credentials and fully validate them.
This is optional, but without Apple account access you will need to provide all the missing values manually and we can only run minimal validation on them.
✓ Do you want to log in to your Apple account? ... yes

> Log in to your Apple Developer account to continue
✓ Apple ID: ... bibek.bhatt@my.ccsu.edu
> Restoring session C:\Users\Bibek Bhatt\.app-store\auth\bibek.bhatt@my.ccsu.edu\cookie
> Team Connecticut Explored, Inc. (S4Z89Q3467)
> Provider Connecticut Explored, Inc. (126990333)
✓ Logged in Local session
✓ Bundle identifier registered com.ctexploreddev.CTExploredGuidedTours
✓ Synced capabilities: Enabled: Sign In with Apple
✓ Synced capability identifiers: No updates
✓ Fetched Apple distribution certificates
✓ Fetched Apple provisioning profiles
Provisioning profile (id: 2735352L9T) is no longer valid
✓ Fetched Apple provisioning profiles
✓ Provisioning Profile - ID: 2735352L9T
  Name: *[expo] com.ctexploreddev.CTExploredGuidedTours AppStore 2024-04-29T18:36:19.797Z
  Expiry: Sat Mar 29 2025
  Would you like to reuse the original profile? ... yes
✓ Fetched Apple provisioning profiles
✓ Updated provisioning profile (2735352L9T) with distribution certificate (A9YDZPG4XV)
✓ Updated Expo profile for @ctexploreddev/CTExploredGuidedTours (com.ctexploreddev.CTExploredGuidedTours)
```

- Reuse the existing provisioning profile.

```
Compressing project files and uploading to EAS Build. Learn more: https://expo.fyi/eas-build-archive
✓ Uploaded to EAS 1s
✓ Computed project fingerprint

Build details: https://expo.dev/accounts/ctexploreddev/projects/CTExploredGuidedTours/builds/c62b0a82-9b7a-4ccb-9ba2-8211ae6d21a8

Waiting for build to complete. You can press Ctrl+C to exit.
✓ Build finished

🍏 iOS app:
https://expo.dev/artifacts/eas/qtifz1R6nriJ7GU4AwqE6f.ipa
```

3. Select the build you want to submit to TestFlight using: Eas submit --platform iOS. Ensure compliance with Apple's App Store guidelines before submission.

```

PS C:\GitHub\CTExplored-TechBallers> eas submit --platform ios
★ eas-cli@15.0.15 is now available.
To upgrade, run npm install -g eas-cli.
Proceeding with outdated version.

✓ What would you like to submit? » Select a build from EAS
✓ Which build would you like to submit? » - ID: c62b0a82-9b7a-4ccb-9ba2-8211ae6d21a8 (44 seconds ago)
Ensuring your app exists on App Store Connect. This step can be skipped by providing ascAppId in the submit profile. Learn more: https://expo.fyi/asc-app-id

> Log in to your Apple Developer account to continue
✓ Apple ID: ... bibek.bhatt@my.ccsu.edu
> Restoring session C:\Users\Bibek Bhatt\.app-store\auth\bibek.bhatt@my.ccsu.edu\cookie
> Team Connecticut Explored, Inc. (S4Z89Q3467)
> Provider Connecticut Explored, Inc. (126990333)
✓ Logged in Local session

✓ Bundle identifier registered com.ctexploreddev.CTExploredGuidedTours
✓ Prepared App Store Connect for CTExploredGuidedTours com.ctexploreddev.CTExploredGuidedTours
Looking up credentials configuration for com.ctexploreddev.CTExploredGuidedTours...
✓ App Store Connect API Key already set up.
Using Api Key ID: 5XHD7N3Z6F ([Expo] EAS Submit 5R_MtfYgIu)

ASC App ID: 6480323417
Project ID: eb475563-af70-494f-a38e-d66fede80c47
App Store Connect API Key:
  Key Name : [Expo] EAS Submit 5R_MtfYgIu
  Key ID   : 5XHD7N3Z6F
  Key Source: EAS servers
Build:
  Build ID   : c62b0a82-9b7a-4ccb-9ba2-8211ae6d21a8
  Build Date : 3/14/2025, 8:21:08 PM
  App Version: 0.1.43
  Build number: 2

✓ Scheduled iOS submission

Submission details: https://expo.dev/accounts/ctexploreddev/projects/CTExploredGuidedTours/submissions/3d50b7cf-c9b0-41f0-a3b7-f36d307915a8

```

Note: The submission upload to the Apple Dev platform usually takes 5-10 minutes. Once it is uploaded the members in the internal TestFlight group gets invitation. If you want to add more testers you can add them to this group or you can send out individual invitations.

The screenshot shows the App Store Connect dashboard for the "CTExplored: Guided Tours" project. At the top, there's a navigation bar with links for App Store Connect, Apps, Analytics, Trends, Reports, Business, Users and Access, and a user profile for Bibek Bhatt from Connecticut Explored, Inc.

The main content area displays the submission status for build 0.1.45 (2). It shows the build ID, release date (3/14/2025), and version (0.1.43). There are buttons for "Expire Build" and "Save". Below this, tabs for "Test Information" and "Build Metadata" are visible, along with a language selector for English (U.S.).

Test Details section:

- A note: "What to Test ?" followed by a question mark icon.
- A note: "Let your testers know what you would like them to test in this build. This information will be available to testers in all groups who have access to this build."
- A large text input field with a character count of 4,000.

Group (1) +

Add groups to this build. All testers in these groups will have access to this build.

GROUP NAME	GROUP TYPE	TESTERS
CTExplored TestFlight	Internal	3

Individual Testers (0) +

Add an individual tester to this build.

- Add New Testers
- Add Existing Testers
- Import from CSV

No testers have been added for this build.

4. Review the uploaded build and distribute it for internal testing via TestFlight.

```
Waiting for build to complete. You can press Ctrl+C to exit.  
✓ Build finished  
  
🍏 iOS app:  
https://expo.dev/artifacts/eas/sEn18YdD9TH3roqCkf75EY.ipa  
  
Waiting for submission to complete. You can press Ctrl+C to exit.  
✓ Submitted your app to Apple App Store Connect!  
  
Your binary has been successfully uploaded to App Store Connect!  
- It is now being processed by Apple - you will receive an email when the processing finishes.  
- It usually takes about 5-10 minutes depending on how busy Apple servers are.  
- When it's done, you can see your build here: https://appstoreconnect.apple.com/apps/6480323417/testflight/ios
```

Main Features

1. Tour Selection

A list of tours will appear when opening the app. Users can scroll through and click on any tour they wish to view. Selecting a tour will bring the user to a map view and will contain multiple points of interests (POIs) related to the tour. Tours are split into multiple categories that show the recommended form of travel when following the tour. The categories can be seen on the “Select a Tour” page in the bottom-left corner of each tour. The categories are walking, biking, and driving.

 Connecticut Explored

Select a Tour



Hartford's 1st Black Congregation Tour



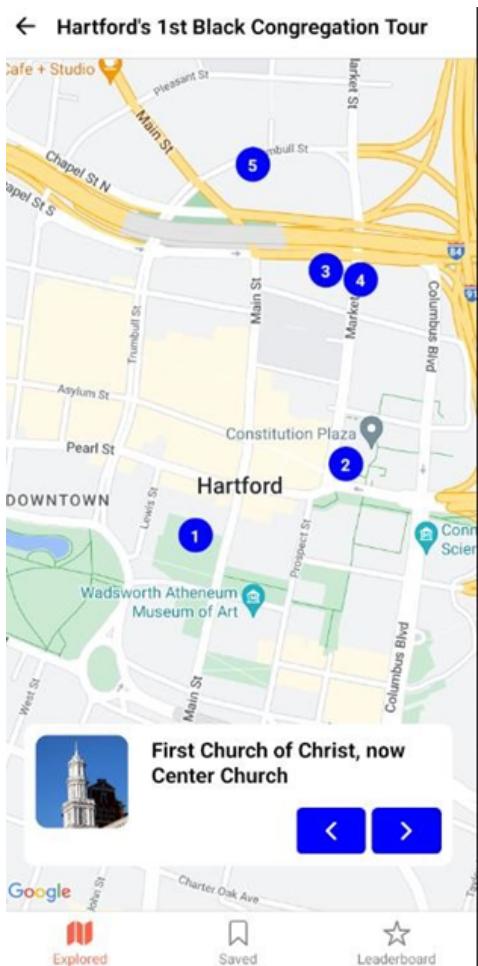
Unearthing Connecticut's Vampire Lore



 Explored  Saved  Leaderboard

2. Viewing POIs

When on the map page of a tour, multiple blue circles with numbers will be shown. These are points of interests (POIs), and they can be clicked on to view more information about the POI, such as images, descriptions, historical context, and related articles. There will be a box at the bottom of the screen that shows the name and a picture of the current selected POI. The name of the POI in this box can be tapped to also view more information. Clicking on the arrows will allow the user to jump from one POI to the next on the map.



3. Navigation Assistance

While on the detailed information page of a POI, the blue address can be clicked to give you directions to its location. This integrates with the Google Maps or Apple Maps application on your phone.

← Stop 1: First Church of Christ, now Center Church



60 Gold St, Hartford, CT, 06103

In 1819, a group of African Americans in Hartford grew weary of being assigned seats in the galleries and in the rear of churches and decided to begin worshipping on their own in the conference room of the First Church of Christ, now Center Church, in Hartford. This became the first black Congregational Church in Connecticut, the third oldest in the nation.

Click to Play

Instagram Save Read More



60 Gold St
Hartford, CT 06103
Building

Ancient Burial Ground 4.6 ★★★★★ (90) Cemetery

Center Church 4.5 ★★★★★ (15) United Church of C

Directions Directory Save Share



4. Read More

While viewing the information page of a POI, users will have access to the “Read More” button on the bottom. Clicking this button will open the browser and bring them to an article on the CTExplored’s website related to the POI and tour that the user is currently viewing.

← Stop 1: First Church of Christ, now Center Church



📍 60 Gold St, Hartford, CT, 06103

In 1819, a group of African Americans in Hartford grew weary of being assigned seats in the galleries and in the rear of churches and decided to begin worshipping on their own in the conference room of the First Church of Christ, now Center Church, in Hartford. This became the first black Congregational Church in Connecticut, the third oldest in the nation.

▶ Click to Play

Instagram Save 

ctexplored.org/faith-con + ⌂ ⋮

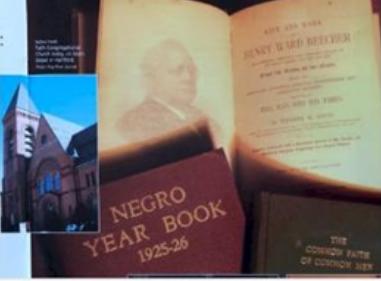
Sign In E-Newsletter

Connecticut Explored

Faith Congregational Church: 185 Years—Same People, Same Purpose

◀ ▶ Show all

Faith Congregational Church:
185 Years—Same People, Same
Purpose



5. POI Quick Navigation

On the detailed information page of a POI, arrows can be found at the bottom (scrolling may be needed). Like the arrows on the map screen, clicking on these can take you from one POIs detailed view to the next without having to go back to the map screen. This provides users with another option of following the tour which requires less back-and-forth navigation that might be confusing to some.

← Stop 1: The Mix Manufacturing Company



📍 491-359 Mixville Rd, Cheshire, CT, 6410

Ball & Socket Manufacturing was founded when Cheshire was primarily an agricultural community. Cheshire never became an industrial center, but other small mills and factories were scattered around town during the second half of the 19th century. The Mix Manufacturing Company made Britannia spoons and later gimlets and auger bits; the Cheshire Brass Company produced sheet brass; and the Capewell Horse Nail Company, which later moved to Hartford, manufactured horseshoe nails. The Ball & Socket Manufacturing Company flourished, becoming the largest factory in town and one of the largest manufacturers of metal buttons in the world.

🔊 Click to Play



Instagram



Save



Read More

← Stop 2: Ball & Socket Manufacturing Company



📍 493 West Main Street, Cheshire, CT, 6410

For almost 150 years, workers walked the floors of the Ball & Socket Manufacturing Company. Originally formed as Cheshire Manufacturing in 1850, the company was a major producer of buttons and fasteners for textiles. The site of the factory buildings was chosen for its proximity to the New Haven and Northampton Railroad, newly built in 1848 along the towpath of the former Farmington Canal, which enabled products to be shipped to the port city of New Haven and beyond by rail or ship.

🔊 Click to Play



Instagram



Save



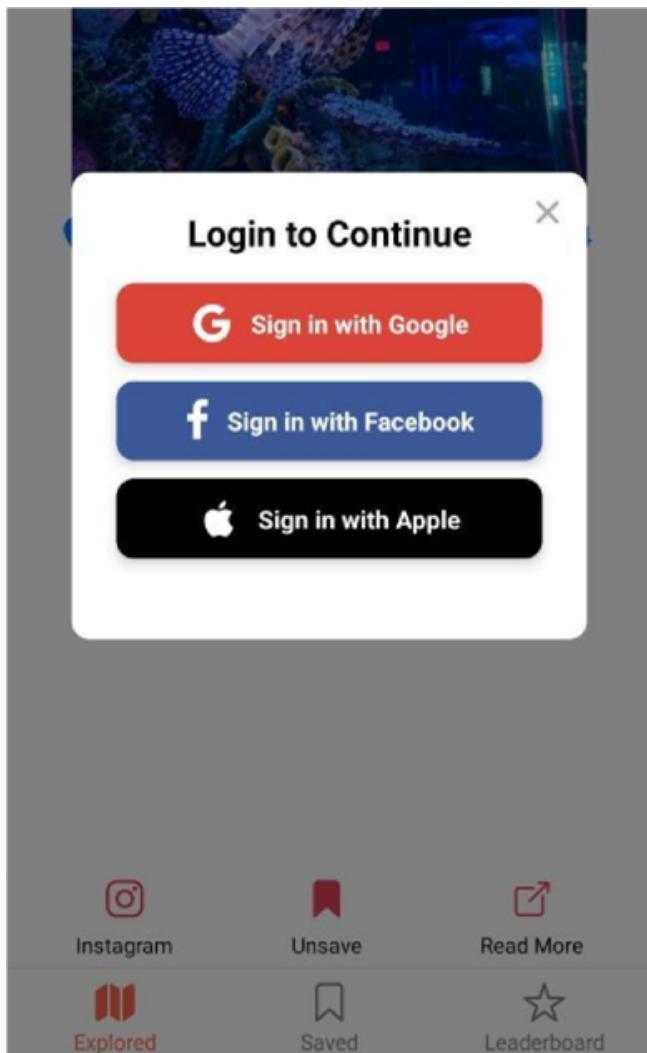
Read More

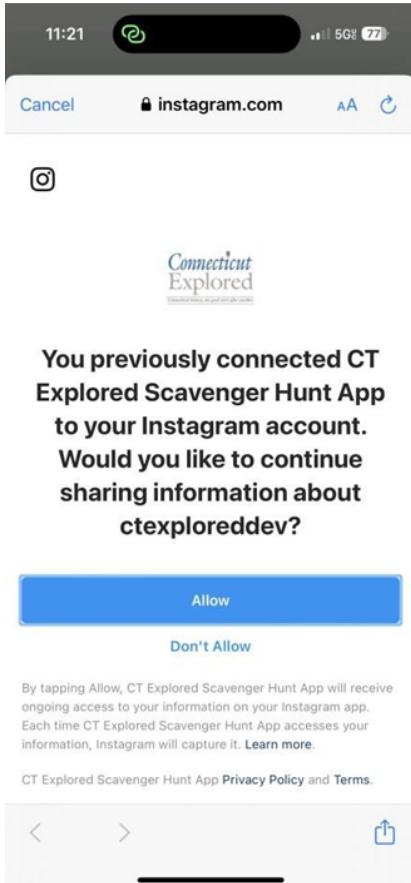
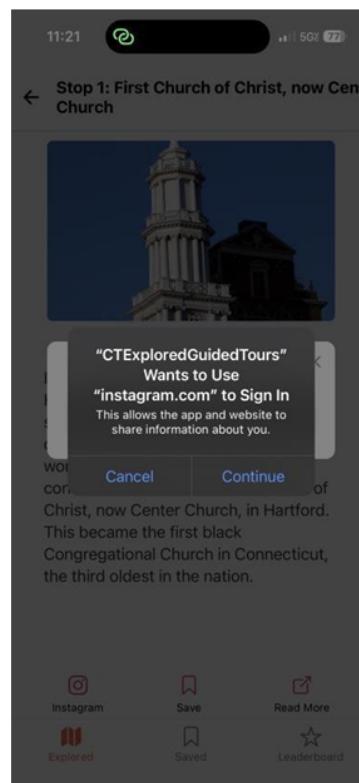
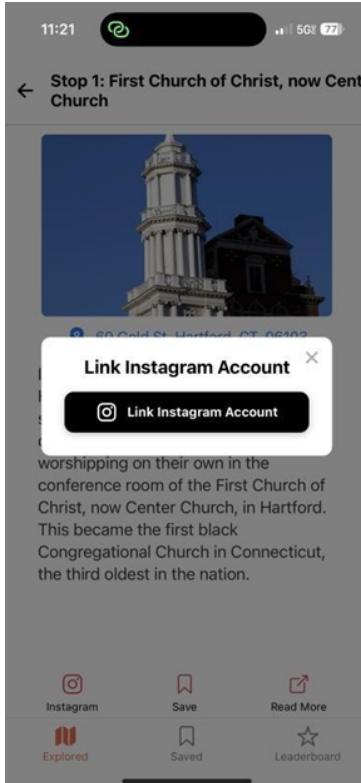
6. Instagram Integration

Users can link their Instagram account to the app. On the detailed information page of any POI, clicking on the “Instagram” button will prompt the user to first login using Google, Facebook or Apple ID.

Clicking on it again will then allow the user to login with their Instagram account. This allows users to make direct posts from the CT Explored app.

Note: Only Business or Creator Instagram Accounts can use this feature.





7. Text-to-Speech Feature

While viewing a POI's information page, users can click on the “Click to Play” button to have the app verbally read out the POI’s description via Text-to-Speech. This accessibility feature allows ease of use for visually impaired users.

← Stop 1: First Church of Christ, now Center Church



📍 60 Gold St, Hartford, CT, 06103

In 1819, a group of African Americans in Hartford grew weary of being assigned seats in the galleries and in the rear of churches and decided to begin worshipping on their own in the conference room of the First Church of Christ, now Center Church, in Hartford. This became the first black Congregational Church in Connecticut, the third oldest in the nation.

🔊 Click to Play



Instagram

Save

Read More

8. Saving POIs

At the bottom of a POIs detailed information page, users can click on the “save” button to save that POI for future viewing. All saved POIs can be viewed from the “Saved” section of the app, which can be reached by returning to the tours page and clicking on the “Saved” tab at the bottom.

← Stop 1: First Church of Christ, now Center Church



📍 60 Gold St, Hartford, CT, 06103

In 1819, a group of African Americans in Hartford grew weary of being assigned seats in the galleries and in the rear of churches and decided to begin worshipping on their own in the conference room of the First Church of Christ, now Center Church, in Hartford. This became the first black Congregational Church in Connecticut, the third oldest in the nation.

▶ Click to Play

Instagram  Unsave  Read More 

Connecticut Explored

Select a Tour



Hartford's 1st Black Congregation Tour 



Unearthing Connecticut's Vampire Lore 

Explore  Saved  Leaderboard 

Connecticut Explored

Saved Locations



First Church of Christ, now Center Church

Explore  Saved  Leaderboard 

9. Leaderboard

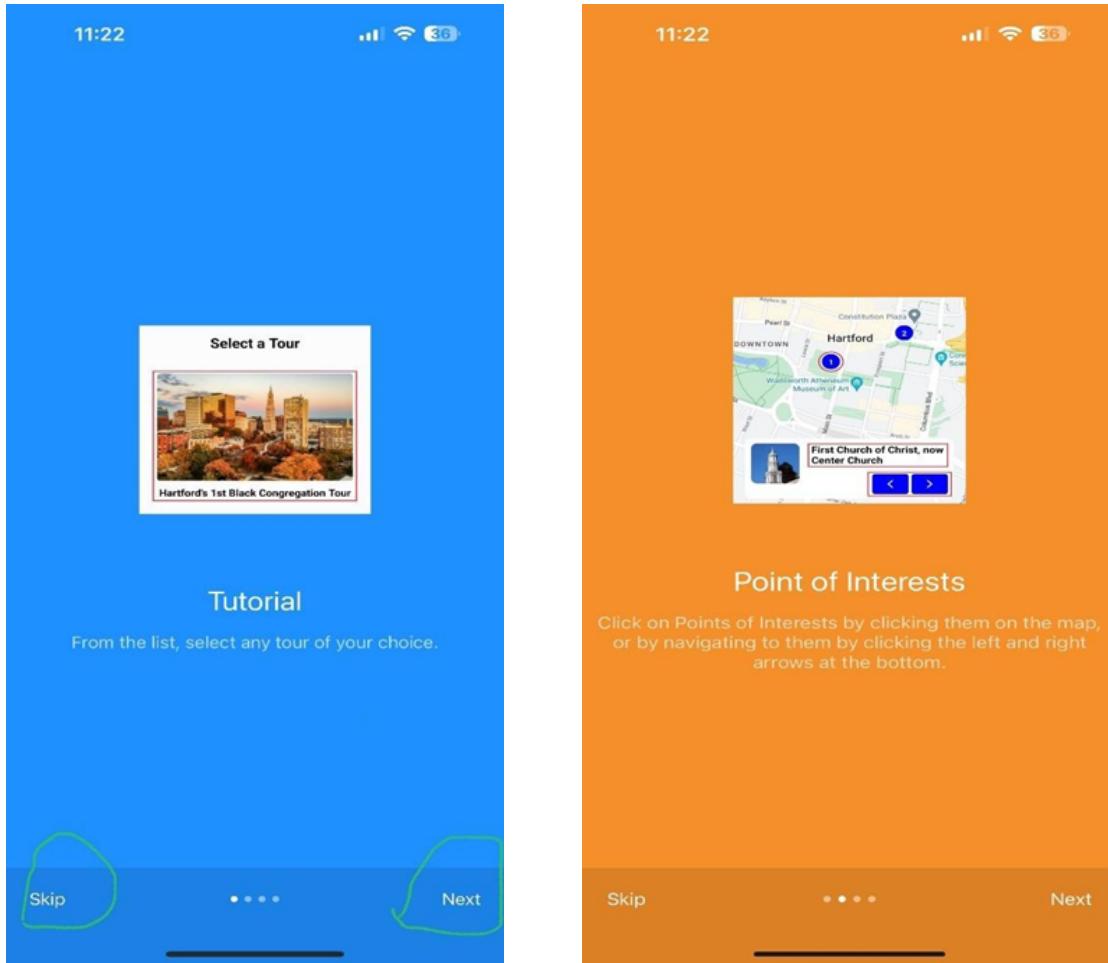
After connecting their account to Instagram, users can earn points by posting photos with the designated hashtag. The leaderboard can be viewed by clicking on the “Leaderboard” tab at the bottom. This tab will show users the rankings as well as the user’s current scores.

Rank	Username	Score
1	HollyMolly	99
2	ctexploreddev	25
3	user1	10
4	user1015	7
5	user101	6

Leaderboard

10. App Tutorial

Users can click on a button in the top left corner of the tours page to activate a small tutorial on how to navigate the app. The tutorial quickly covers selecting a tour, viewing POI information, navigating POIs, activating GPS for a POI, and location additional features such as logging into Instagram, saving POIs, and viewing tour articles. The tutorial can be navigated by clicking on the “next” button on the bottom right or by swiping left and right.





11. Leaderboard and Prize Tutorial

Users can click on a button in the top left corner of the leaderboard page to activate a brief tutorial about how to earn points and what prizes you can win. The tutorial can be navigated by clicking on the “next” button on the bottom right or by swiping left and right.

The screenshot shows the ConnecticutExplored app's Leaderboard screen. At the top, there is a navigation bar with a question mark icon in a green box, the text "ConnecticutExplored", and a user profile icon. Below the navigation bar is the title "Leaderboard". The main area displays a table of users with their ranks, usernames, and scores. The table has columns for Rank, Username, and Score. The data is as follows:

Rank	Username	Score
1	ctexploreddev	125
2	HollyMolly	99
3	techballers88	35
4	ctbullybusters	5
5	minhctram	2
6	vinny.daria	0

At the bottom of the screen are three buttons: "Explored" (with a book icon), "Saved" (with a bookmark icon), and "Leaderboard" (with a star icon). A blue overlay titled "Leaderboard Tutorial" is displayed, containing the text "Earn points to compete on the leaderboards!" and a "Next" button at the bottom right.

Point of Interests

Visit Points of Interest on a tour, link your Instagram account, snap a photo, and upload it to Instagram using #CTExplored

• • •

Next

Earning Points

You will earn 5 points per photo!

Every 50 points you are eligible to receive a prize!

Choose from great prizes like water bottles, t-shirts, and coffee mugs!

Do you have enough points for a prize?

[Click Here To Choose A Prize!](#)

✓

Additional Walkthrough- Using Text to Speech

1. Open the app and select a tour from the list.
2. Tap on a POI marker on the map.
3. On the POI details page, locate the "Click to Play" button.
4. Tap the button to hear an audio narration of the POI description.

← Stop 1: First Church of Christ, now Center Church



📍 60 Gold St, Hartford, CT, 06103

In 1819, a group of African Americans in Hartford grew weary of being assigned seats in the galleries and in the rear of churches and decided to begin worshipping on their own in the conference room of the First Church of Christ, now Center Church, in Hartford. This became the first black Congregational Church in Connecticut, the third oldest in the nation.

Click to Play

← Stop 1: First Church of Christ, now Center Church



📍 60 Gold St, Hartford, CT, 06103

In 1819, a group of African Americans in Hartford grew weary of being assigned seats in the galleries and in the rear of churches and decided to begin worshipping on their own in the conference room of the First Church of Christ, now Center Church, in Hartford. This became the first black Congregational Church in Connecticut, the third oldest in the nation.

Click to Stop

 Instagram

 Save

 Read More

 Instagram

 Save

 Read More

Additional Walkthrough- Using Read More

1. Open the app and select a tour.
2. Navigate the map to explore POIs.
3. Click on a POI to access its description along with its detailed article, images, and navigation options.

← Stop 1: First Church of Christ, now Center Church



📍 60 Gold St, Hartford, CT, 06103

In 1819, a group of African Americans in Hartford grew weary of being assigned seats in the galleries and in the rear of churches and decided to begin worshipping on their own in the conference room of the First Church of Christ, now Center Church, in Hartford. This became the first black Congregational Church in Connecticut, the third oldest in the nation.

🔊 Click to Play



Instagram



Save

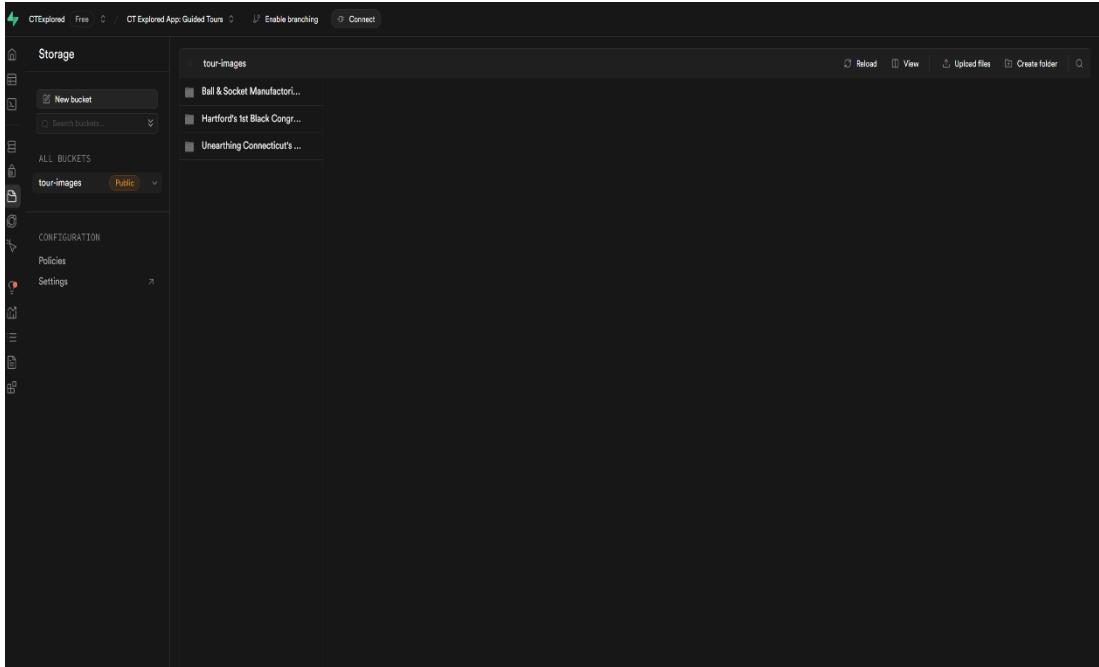


Read More



Additional Features

- **S3 Bucket:** All pictures are served through Superbase's storage system, utilizing an S3-compatible bucket allowing for faster load times without taking up device storage.



- **User Authentication:** Secure login via Google, Facebook, or Apple ID.
- **Offline Access:** Cached data allows users to view limited information offline.

6. Troubleshooting & Support

- **App Crashes:** Ensure the app is updated to the latest version.
- **Internet Issues:** Verify connectivity for accessing online features.
- **Login Problems:** Check login credentials and authentication settings.
- **Leaderboard Delays:** Refresh the app or verify hashtag usage for real-time updates.
- **Navigation Issues:** Ensure GPS permissions are enabled.
- **TestFlight Installation Errors:** Check that the TestFlight app is updated.