

Voice Vault

Quick installation Guide

+

User Guide

System Overview

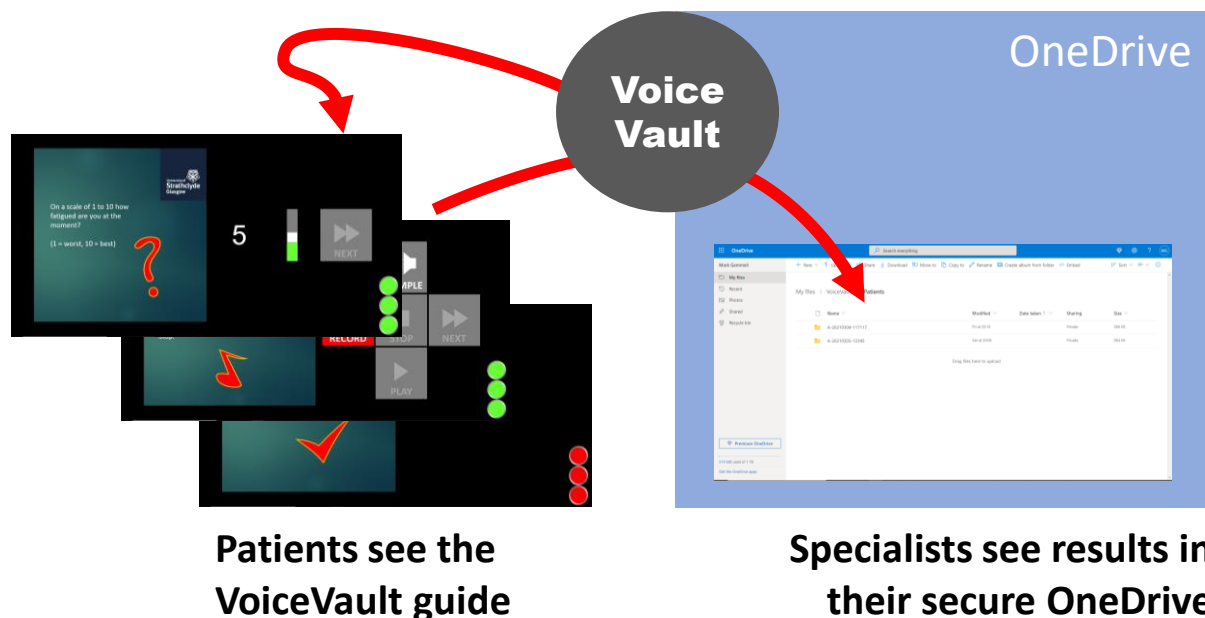
What is VoiceVault?

VoiceVault is a web app for recording patient voice and storing results in OneDrive cloud storage. All data is secure and anonymous.

How does it work?

The voice specialist creates an appointment for the patient and sends the patient a link via email or a messaging app. The patient then clicks on the link and follows the instructions on screen. The patient can use a PC, Mac, tablet or smartphone to complete the test.

The specialist only needs to access their own private OneDrive in order to create appointments and review results. Patients only see the VoiceVault web app. They do not need to give any personal details and they have no access to sensitive data at any time.



About this guide

This guide contains all information necessary to install and operate VoiceVault once ownership of the Heroku server has been transferred.

Quick Installation Guide

The 7 steps necessary to prepare OneDrive to accept VoiceVault, to configure Heroku, and to authorize VoiceVault for access to OneDrive.

User Guide

The voice specialist is the main user. Appointment creation and results review are covered in this section.

Patient View

A description of the interface presented to the patient when they click on the link sent to them by the voice specialist.

System Health

Mechanisms to help the voice specialist know VoiceVault is operational.

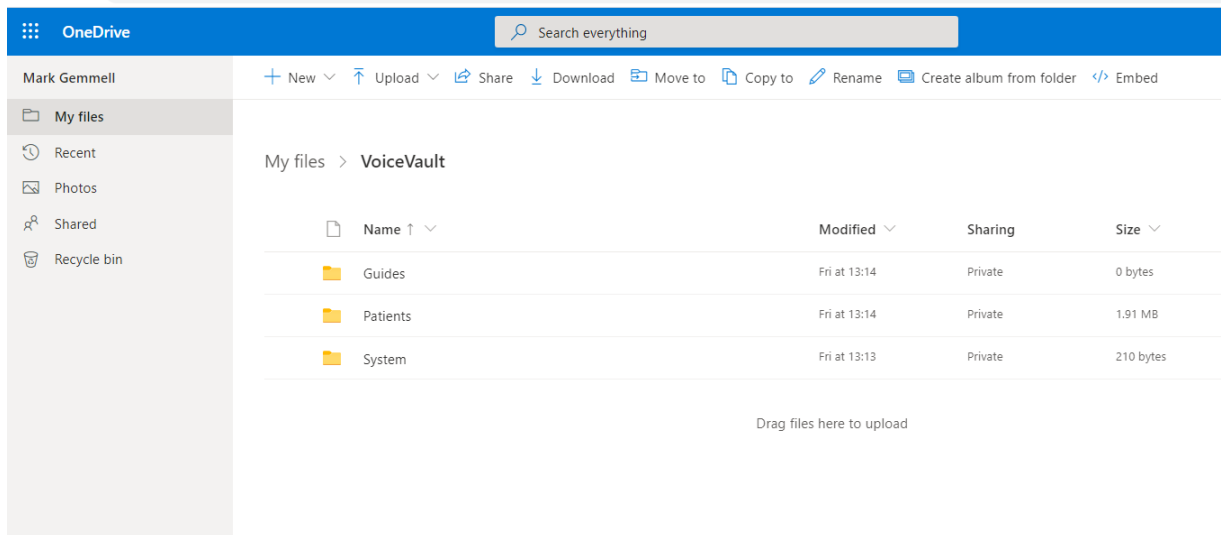
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Prepare your OneDrive for VoiceVault (2 steps):

1. Create a folder in your OneDrive root folder called “VoiceVault”
2. Create three sub-folders in this “VoiceVault” folder: “Guides”, “System” and “Patients”

If you have completed this correctly you should be able to see the following in your OneDrive:



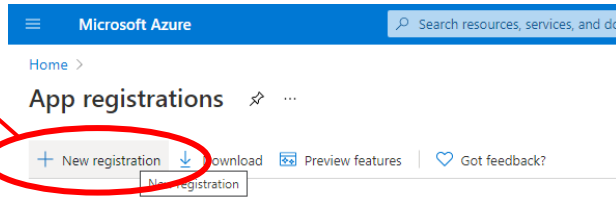
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Register VoiceVault to access your OneDrive (4 steps):

1. Click [here](https://portal.azure.com/#blade/Microsoft_AAD_RegisteredApps/ApplicationsListBlade) to open app registrations in Microsoft Azure
(https://portal.azure.com/#blade/Microsoft_AAD_RegisteredApps/ApplicationsListBlade)

2. Click on “New Registration”



3. Complete the registration form as shown

Name: VoiceVault

Supported account types: (select the second option which covers personal and organizational accounts)

Redirect URI: <https://voicevault.herokuapp.com/authcallback>

Microsoft Azure

Home > App registrations >

Register an application

Warning: This application will not be associated with any directory and will be subject to limitations. You should not create production apps outside of a directory.

Name

The user-facing display name for this application (this can be changed later).

VoiceVault

Supported account types

Who can use this application or access this API?

☐ Accounts in any organizational directory (Any Azure AD directory - Multitenant)

☒ Accounts in any organizational directory (Any Azure AD directory - Multitenant) and personal Microsoft accounts (e.g. Skype, Xbox)

☐ Personal Microsoft accounts only

[Help me choose...](#)

Redirect URI (optional)

We'll return the authentication response to this URI after successfully authenticating the user. Providing this now is optional and it can be changed later, but a value is required for most authentication scenarios.

Web

[Register](#)

4. Click “Register” to complete

Quick Installation

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Obtain the client ID (1 step):

After clicking on “Register” you will be shown the “Overview” screen:

The screenshot shows the Microsoft Azure portal interface. The top navigation bar includes the Microsoft Azure logo and a search bar. The left sidebar contains navigation links for 'Overview', 'Quickstart', 'Integration assistant', 'Manage', 'Support + Troubleshooting', and 'New support request'. The main content area displays the 'Overview' screen for an application registration. The 'Essentials' section shows the 'Application (client) ID' as 10bade78-ecf2-429f-b083-77e65c022208, which is circled in red. A red arrow points from this ID to the first step of the installation instructions. Other details shown include the 'Object ID', 'Directory (tenant) ID', 'Supported account types', 'Redirect URIs', and 'Application ID URI'. The 'Call APIs' section is also visible, along with a 'View API permissions' button.

1. Copy the Application (client) ID to a text note. You will need it later.

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Obtain the app “Secret” (4 steps):

1. Click on “Certificates & Secrets”

Microsoft Azure

Home > App registrations > VV

VV | Certificates & secrets

Search (Ctrl+/)

Overview

Quickstart

Integration assistant

Manage

Branding

Authentication

Certificates & secrets

Token configuration

API permissions

Expose an API

Owners

Manifest

Support + Troubleshooting

Troubleshooting

New support request

Credentials enable confidential applications to identify themselves to the authentication service when receiving tokens at a web addressable location (using an HTTPS scheme). For a higher level of assurance, we recommend using a certificate (instead of a client secret) as a credential.

Certificates

Certificates can be used as secrets to prove the application's identity when requesting a token. Also can be referred to as public keys.

Upload certificate

Thumbprint	Start date	Expires	ID
No certificates have been added for this application.			

Client secrets

A secret string that the application uses to prove its identity when requesting a token. Also can be referred to as application password.

+ New client secret

Description	Expires	Value	ID
No client secrets have been created for this application.			

2. Click on “New client secret”

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Continued...

3. You can leave the description empty. Set secret to never expire and click “Add”

Add a client secret

Description

Expires

☒ Never

☐ In 2 years

☐ 1 year

Microsoft Azure

Search resources, services, and docs (G+/)

Home > App registrations > VV

VV | Certificates & secrets

Search (Ctrl+/)

Got feedback?

Copy the new client secret value. You won't be able to retrieve it after you perform another operation or leave this blade.

Credentials enable confidential applications to identify themselves to the authentication service when receiving tokens at a web addressable location (using an HTTPS scheme). For a higher level of assurance, we recommend using a certificate (instead of a client secret) as a credential.

Certificates

Certificates can be used as secrets to prove the application's identity when requesting a token. Also can be referred to as public keys.

Upload certificate

Thumbprint	Start date	Expires	ID
No certificates have been added for this application.			

Client secrets

A secret string that the application uses to prove its identity when requesting a token. Also can be referred to as application password.

New client secret

Description	Expires	Value	ID
Password uploaded on Tue Mar 09 2021	12/31/2299	r12mNVh43_-28QN/p.MgQO_-tSR4B3FkU	f3ec8a-7726-4ada-8dae-be896399b322

3. Copy the Secret Value to a text note. You will need it soon.

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Set the app permissions (scope) (5 steps):

1. Select "API Permissions"

The screenshot shows the Microsoft Azure portal interface. On the left sidebar, the 'API permissions' option is highlighted with a red circle. The main content area displays the 'Request API permissions' dialog for the 'Microsoft Graph' API. The 'Delegated permissions' section is active, and the 'offline_access' permission is selected with a red circle. Below this, the 'Files' category is expanded, and the 'Files.ReadWrite' permission is selected with a red circle. At the bottom of the dialog, the 'Update permissions' button is highlighted with a red circle. Red arrows indicate the flow from the sidebar to the dialog and then to the specific permissions.

2. Click on "Microsoft Graph"

3. Select "offline_access"

4. Scroll down to "Files" and select "Files.ReadWrite"

5. Click on "Update permissions" to save the changes

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Configure Heroku to access OneDrive (2 steps):

1. Open the heroku [settings page](https://dashboard.heroku.com/apps/voicevault/settings) for the voicevault app :
(<https://dashboard.heroku.com/apps/voicevault/settings>)

The screenshot shows the Heroku dashboard for the 'voicevault' app. The 'Settings' tab is selected, displaying 'App Information' and 'Config Vars'. The 'App Information' section includes fields for App Name (voicevault), Region (Europe), Stack (heroku-20), Framework (Node.js), Slug size (41.4 MIB of 500 MIB), and Heroku git URL (https://git.heroku.com/voicevault.git). The 'Config Vars' section shows two existing variables: 'clientID' with value '1cb0b9a5-058b-4224-a31e-7da7f1d92829' and 'clientSecret' with value '1n3~PG1mu4xflpaz~hhmq12Na_V-Z95Z97'. There is an 'Add' button at the bottom right of the Config Vars section.

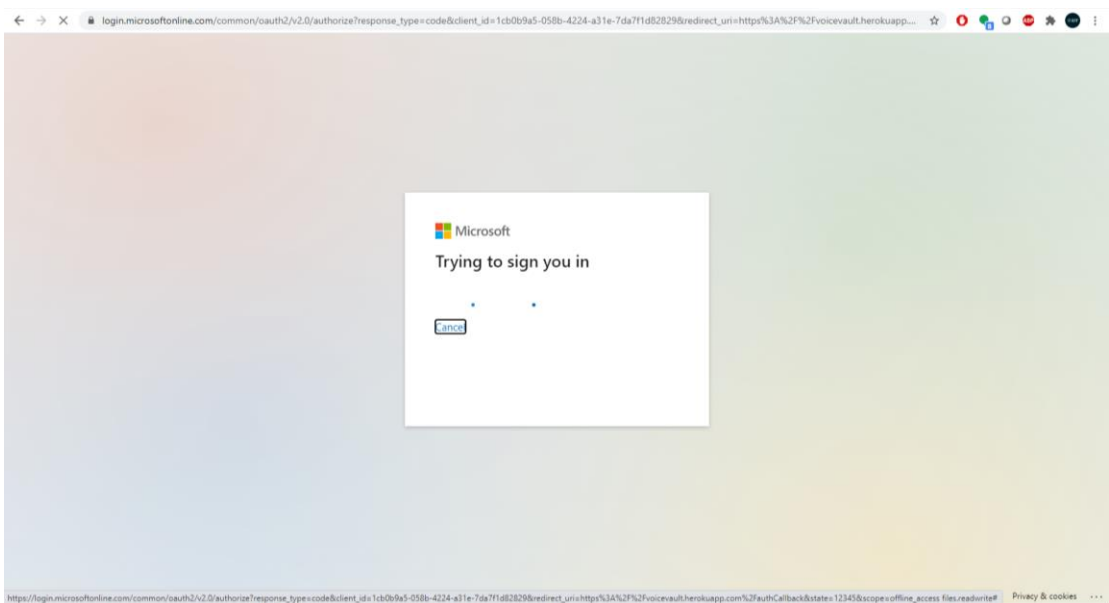
2. Add Config Vars for the KEYS “clientID” and “clientSecret” with the VALUES copied earlier in this guide. When you click on “Add” the vars are saved.

Quick Installation

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Authorize VoiceVault for OneDrive

1. Open the VoiceVault [authorization page](https://voicevault.herokuapp.com/authorize):
(<https://voicevault.herokuapp.com/authorize>)



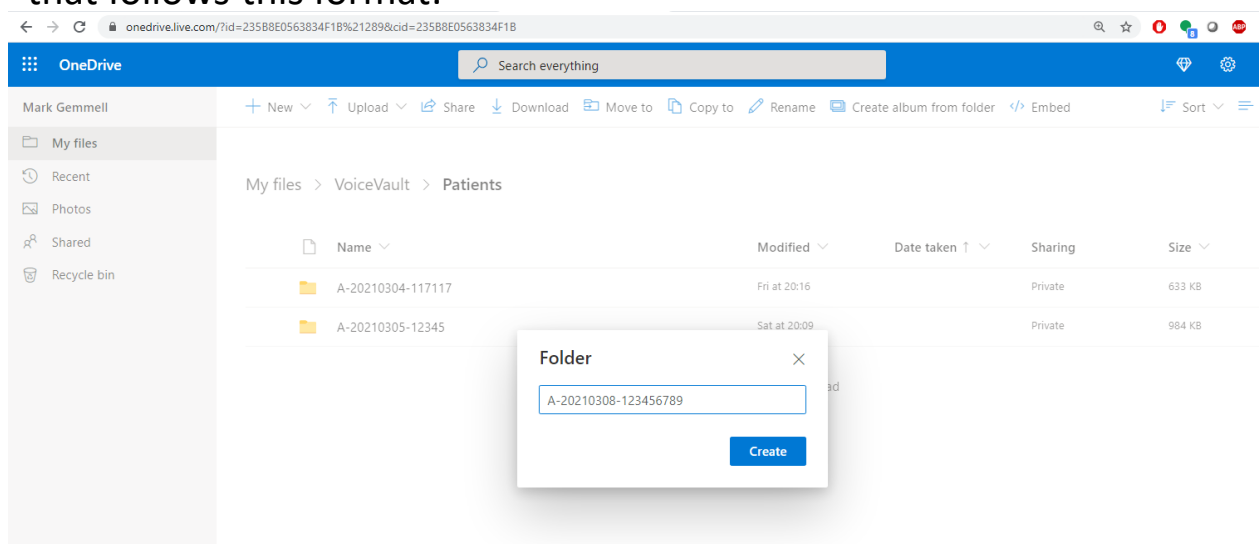
You may need to sign-in to Microsoft with your OneDrive user and password, or it may use a previous sign-in session (as above). Authorization automatically generates an authorization token for VoiceVault once your user is authenticated.

NOTE: Authorization tokens generated by Microsoft have a typical lifespan of 90 days. It is recommended that this authorization step be repeated approximately every month. VoiceVault will be unable to attend users if the authorization token is expired.

User Guide

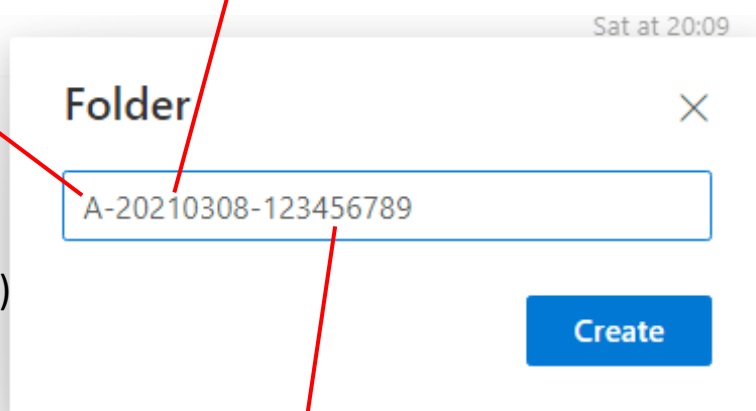
Creating a patient test appointment

In the folder /VoiceVault/Paients create a new folder with a name that follows this format:



Test date = 8th March 2021 (format is YYYYMMDD)

Guide ID = "A"
(There can be different guides for different tests)



Patient ID = 123456789 (can be any series of digits)

User Guide

Sending the appointment link to the patient

The link for the previous example appointment would be:

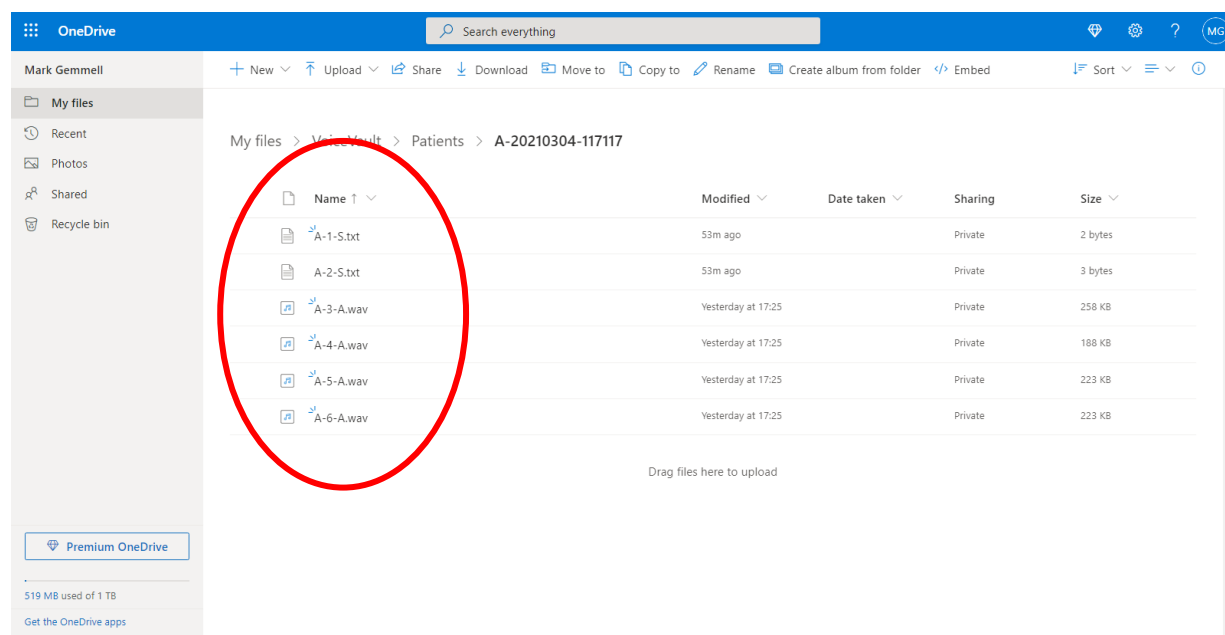
<https://voicevault.herokuapp.com/?id=A-20210308-123456789>

Simply change the id in the link to be the same as the folder created for the patient appointment.

This can be copied and pasted to an email or other text message.

The patient only needs to click on the link and follow the instructions on screen to complete the test.

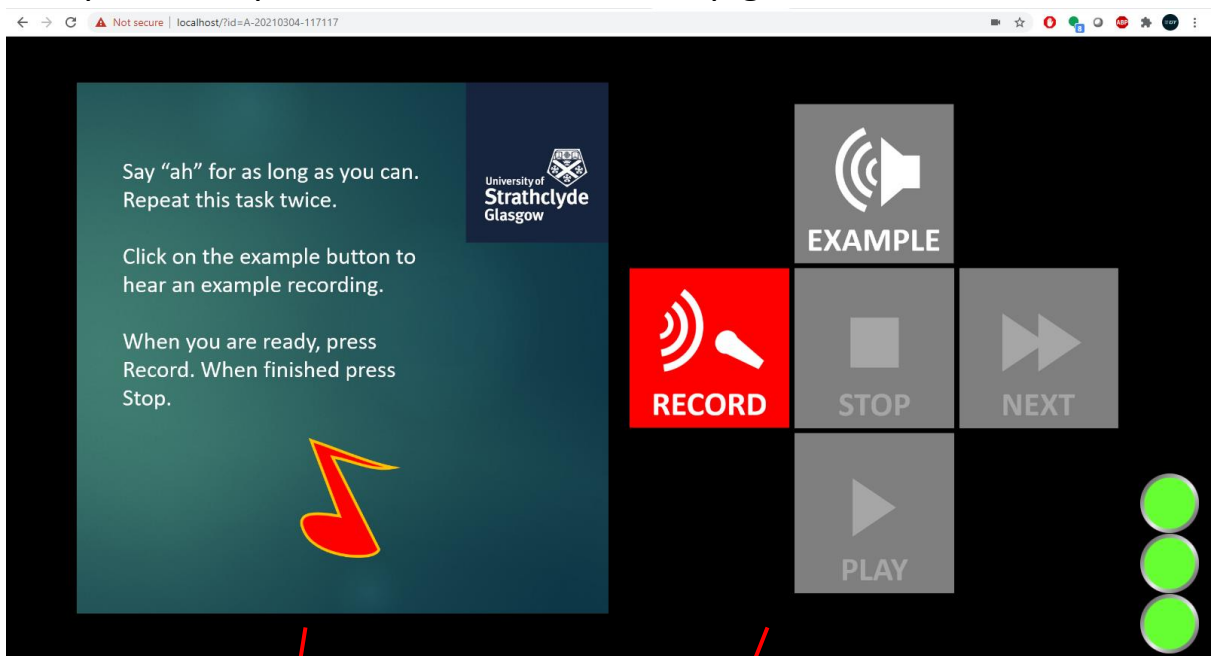
The appointment folder will then contain the patient voice recordings and responses, each response in an individual file with the corresponding guide and step as the filename:



Patient View

What the patient sees when they click on the link:

The patient is presented with a multi-step guide similar to this:



Instruction area:
Each step in the guide presents a different set of instructions to the patient.

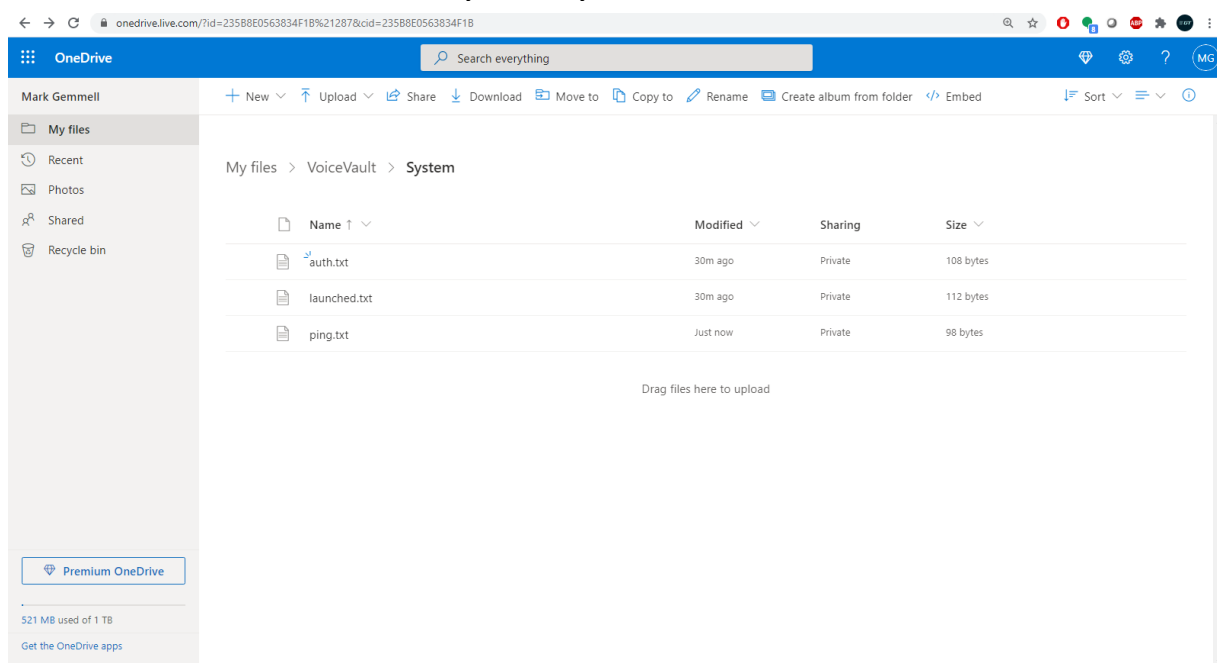
Control area:
These controls change depending on the task being requested.

System monitor:
Three green lights indicate all is working well. Any prolonged orange or red lights indicate there is an issue.

System Health

Monitoring VoiceVault activity

In the folder `/VoiceVault/System` you will find three files



auth.txt: Indicates when you last authorized VoiceVault

launched.txt: Indicates when VoiceVault was last started

ping.txt: Is refreshed every minute VoiceVault is active. The app starts automatically when a user connects and goes to sleep after 60 minutes without user activity. It will not update the ping file when sleeping.

NOTE: Every month or so VoiceVault will need re-authorization to access OneDrive. See page 11 for details.