

Manual for Innersight3D Web Platform

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Intended Use

Innersight3D is intended for the re-visualization of existing CT or MRI data into an interactive 3D model of anatomical structures to facilitate improved surgical planning. It is intended to be used by [trained] healthcare professionals such as surgeons or radiologists in a clinical setting to better inform their clinical judgement on assessment of the patient's anatomy for the purpose of assisting with their pre and intraoperative surgical planning. It is intended to be used in addition to and alongside the original CT/MRI scan.

Preparatory steps

1. Internet connection: Make sure that your smartphone/tablet/desktop computer is connected to the internet.
2. Open google chrome: We recommend to use [Google Chrome](#) (version 77 or higher) or [Mozilla Firefox](#) (version 77 or higher). Innersight3D will **not** work with Internet Explorer.

Login to the web-platform

1. Go to <https://diary.innersightlabs.com>
2. Login: Enter your email address and password, and click sign in.

The home page

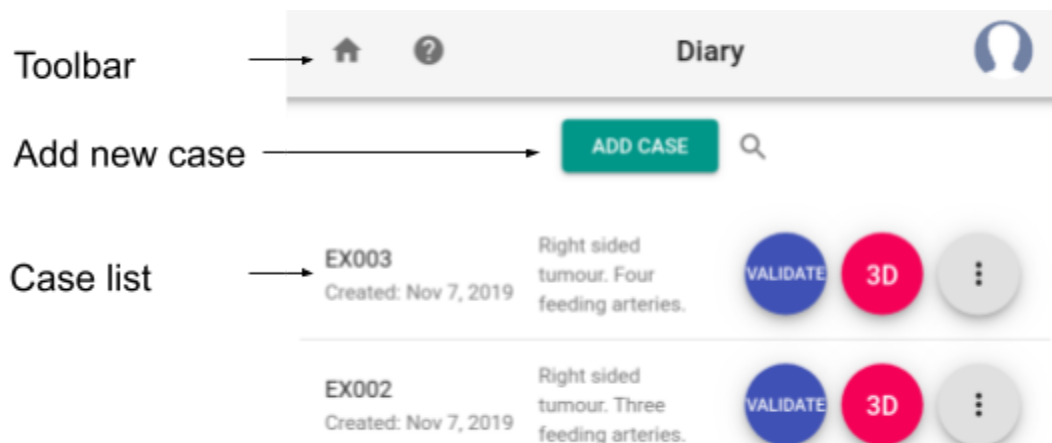


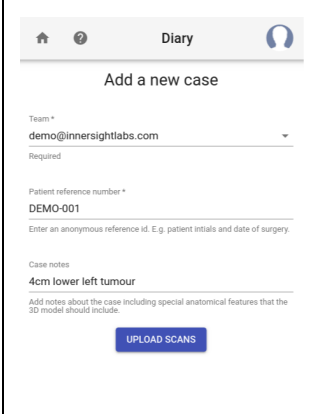
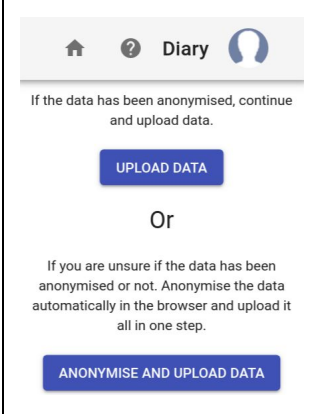
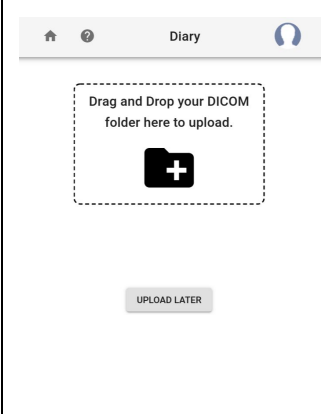
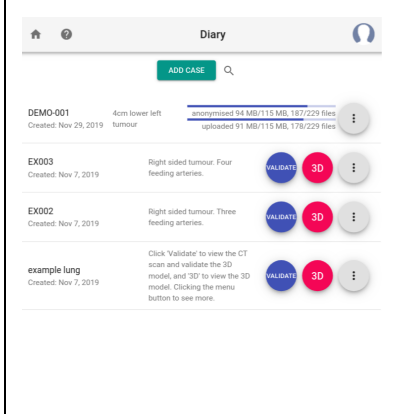
Figure 1. A screenshot of the home page, also known as 'Diary'. The main sections are:
'Toolbar' - The house icon takes you back to the diary page. The question icon opens a instructions dialog. The head icon on the right opens your profile and account information.

'Add new case' - This allows you to add a new case and upload a scan (explained in the next section).

'Case list' - Displays list of created cases. For each case showing: the case reference e.g. 'EX003', the case notes e.g. 'Right sided tumour ..', a 'Validate' button to view the scan and the segmentation, a '3D' button to view the 3D model, a menu button (three dots) to open the case view, allowing you to edit the notes or upload additional data.

Add a new case

Perform the following steps in the table below on a computer that has the DICOM files (CT/MRI scan) stored on it. Also ensure that this computer has good internet connection.

			
<p>Step 1: Fill in the form then press 'UPLOAD SCANS' to continue.</p>	<p>Step 2: Choose one of the upload options to continue.</p>	<p>Step 3: Drag and drop a folder containing the DICOM files (~50-1000 files or more). Or 'UPLOAD LATER'</p>	<p>Step 4: Wait for the upload to complete. Do not refresh or close the tab until the upload has been finished.</p>

If you are unsure how to export the DICOM data from PACS to a folder on your desktop go to <https://innersightlabs.com/faq.html> for more information.

Validator

Clicking on the 'VALIDATE' button will load the uploaded scan which has the segmentation overlaid. The 3D model is directly generated from the segmentation. The segmentation therefore needs to be checked to ensure that the 3D model is correct.

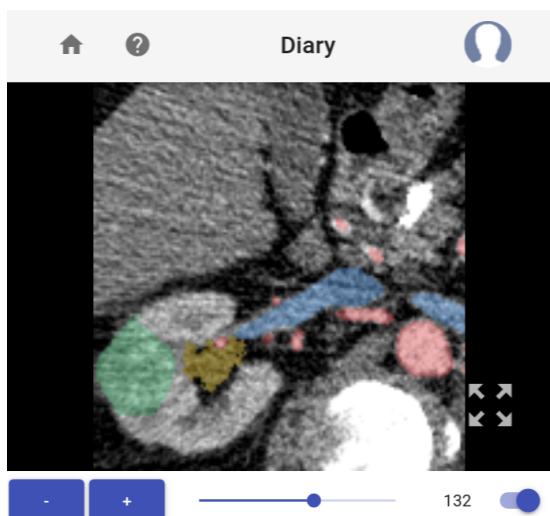


Figure 2: The 'Validate' page.

The plus/minus buttons (bottom left) and the scroll bar (bottom centre) allows the user to scroll through the slices.

The toggle button (bottom right) toggles the segmentation overlay on and off.

The full screen button (four arrows bottom right) toggles the full screen mode on and off.

3D Viewer

Clicking on the “3D” button opens the 3D Viewer for the selected case.

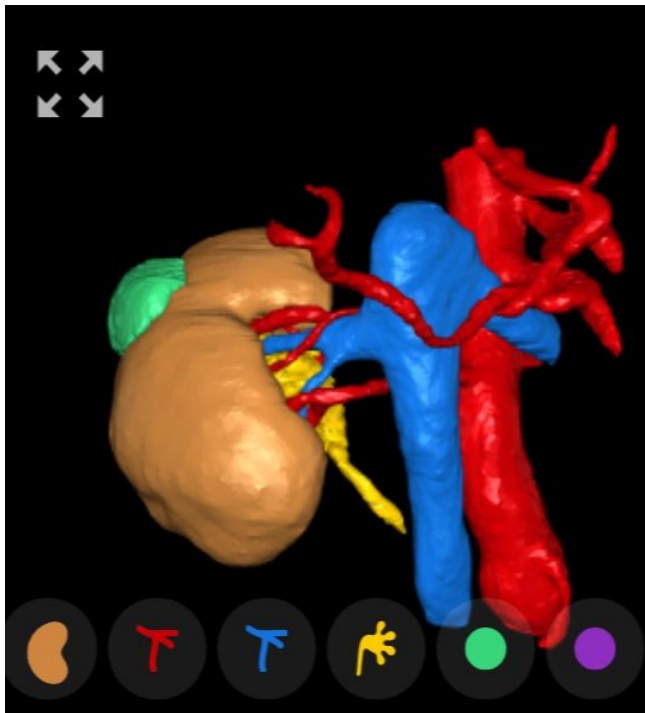


Figure 3. 3D Viewer.

On a *mobile device* with a touch screen:

Rotation - one finger movement.

Translation - two finger movement.

Flipping/barrel roll - two finger rotation (index finger+thumb).

On a *computer* with a mouse:

Rotation - left mouse click hold and spin.

Translation - right mouse click hold and drag.

Flipping/barrel roll - not possible, use a combination of rotation/translation instead.

Buttons along the bottom allow different structures to be toggled on/transparent/off.

The full screen button (top left) toggles the full screen mode on and off.

Warnings

	Innersight3D models are only supposed to be used alongside the original CT/MRI scan for clinical decision making.
	Ensure that the device used for accessing the Innersight3D web-platform is connected to the internet.
	Innersight3D has been developed to be used with Google Chrome (version 77 or higher). Innersight3D will not work using Internet Explorer.

Contraindication

Innersight3D is not supposed to be used solely to guide surgical decision making. It should always be used alongside the original CT/MRI scan.

Upon request, we will send the print version of the manual to your clinic/office.

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