3D Model Binary Vision System

User Manual

Flap_Jacks

Rani Arraf
Quinn du Piesanie
Jacobus Janse van Rensburg
Steven Visser
Marcus Werren

Contents

1 Introduction

1.1 System Overview

This system is to be used by dental professionals as a way to easily store and keep track of their patients and patient's visits. For each patient, a data file can be uploaded to the program. From this file, a 3D image will be created and displayed on screen to the user.

1.2 Deployment Model
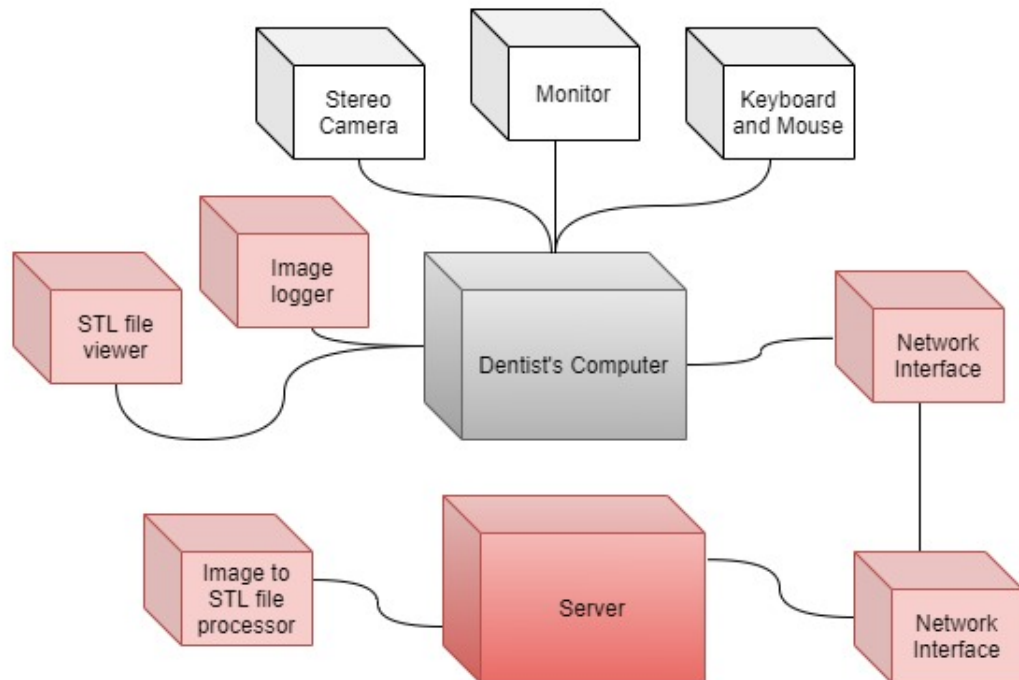
2 Installation

This program requires no installation for use as it is a web application. It is, however, required that you have a web browser installed, such as Google Chrome or Firefox. In order to use this system, go to the web address below.

http://flapjacks.goodx.co.za

3 Getting Started

This section of the manual covers all of the instructions that pertain to visiting the website for the first time. Particularly, how to create an account, log into or out of the application, and what to do if you have forgotten your password.

3.1 Landing Page

Navigate to the link provided under Installation. This will direct you to the landing page, which gives a brief description of the system. This page gives the user the option to go to registration if they do not have an account, or to go to login, if they have an already existing account.
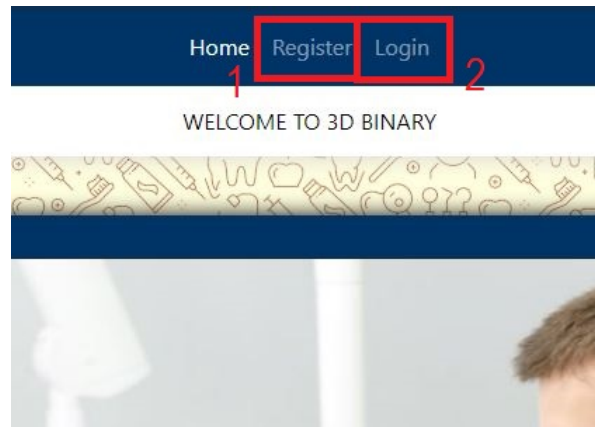
1. Click on 'Register' to be redirected to the registration page. This is where new users can register an account onto the system so that they can log in.

2. Click on 'Login' to be redirected to the login page. This is where returning users or people with an account can log into the system.

3.2 Login

This is the Login Page. This is where a user enters his/her details in order to log into the system.

1. This is where the user will enter their Username.

2. This is where the user will enter their password.

3. This is the submit button. If the user has given valid login credentials, when this button is clicked, the user will be redirected to their account home page.

4. A user can click this when they have forgotten their password to their account. It will redirect the user to the Forgotten Password page.

5. If a user does not yet have an account, clicking here will redirect them to the Registration page, where they will be able to enter their details to create a new account.

3.3   Registration

This is the registration page. Here is where a user enters their personal details in order to create an account on the system.
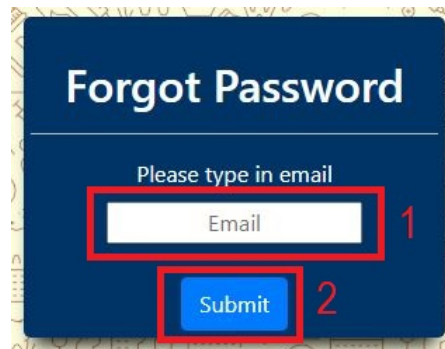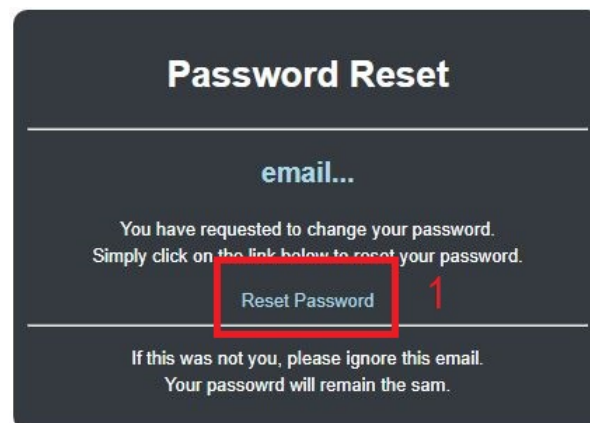
1. User will enter their First Name(s) here.

2. User will enter their Last Name here.

3. User will enter a valid email address here.

4. User will enter the username that they will use to log into the system.

5. User will enter the password that they will use to log into the system.

6. User will re-enter their password for confirmation.

7. User will enter the account type that they are making.

8. User will enter the practice that they are registering for.

9. When clicked, if the users information is valid, or the email address is not already registered on the system, then a new account will be created and the user will be redirected to the Login page.

3.4 Forgotten Password

This section will cover the process of recovering a lost password.

1. This is where the user will enter the email that they registered the account with.

2. When clicked, if the email address entered is on the system, an email will be sent to this email address.

1. This is the email that will be received. When this button is clicked, the user will be redirected to the Reset Password page.

1. User must enter new desired password.

2. User must retype this password for confirmation.

3. When clicked, if the new password matches with the confirm password, the users new password will be saved to the system and the user will be redirected to the Login Page.
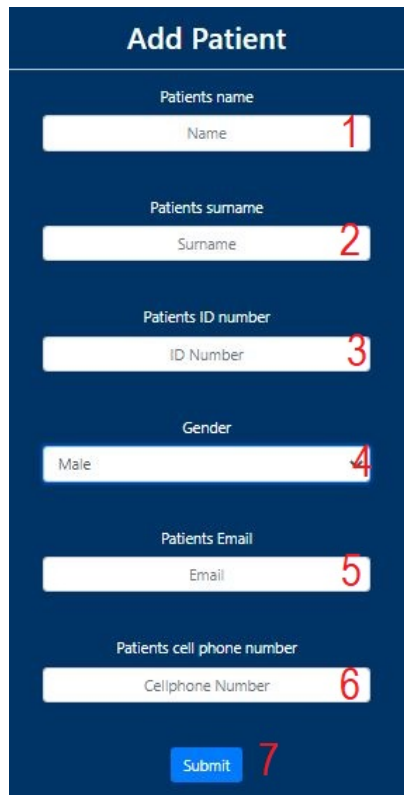
4 Using the System

This section of the manual covers all instructions that pertain to the actual use of the system. With particular reference to creating and editing patients, logging visits for a patient and viewing a patients records.

4.1 Receptionist

This is the Receptionist's home page. From here, a receptionist can switch between pages that allow for adding a patient, creating a booking and viewing the patients waiting for an appointment.

4.1.1 Adding a new Patient

This page allows a user to enter a new patient's personal information and record it on the system.

1. Place to enter the patient's first name.

2. Place to enter the patient's last name.

3. Place to enter the patient's ID number.

4. Place to enter the patient's gender.

5. Place to enter the patient's e-mail.

6. Place to enter the patient's cell number.

7. Click this button to add the new patient to the system.

4.1.2 Waiting Patients

1. Select the doctor who's patients you would like to see.

2. Type a name, only patients who match the search will be displayed.

3. This is where all of the patients will be displayed.

4.1.3 Booking an appointment

1. This is where the receptionist can enter the reason for the booking

2. Click this to select a patient for the booking

3. Click this to select a doctor to make the booking with.

4. Click here to open up the date selection table.

5. Click any time slot to set the date and time for the booking.

6. Click this to add a booking to the database.

4.2 Doctor

This part of the application is for logged in doctors. Doctors can view appointments of patients booked for the current day, view their consultations, upload media and models and view the 3D render.

4.2.1 Doctor Schedule

This page shows the doctors up and coming appointments for the current day.
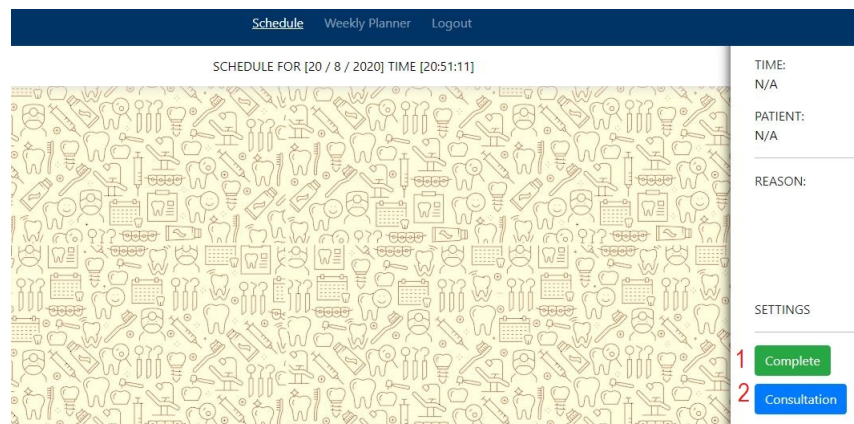
1. Click this to end a consultation with a patient. It will no longer be displayed.

2. Click this to view the current patients consultation page.

4.2.2 Patient Model

This page is where the user can view a patients model, or upload new media to the application to be used for the model. The media can either be an mp4 file or an STL file. If the user does not have an mp4 file already, the application can record for them.

4.2.3 Viewing a Patients Model
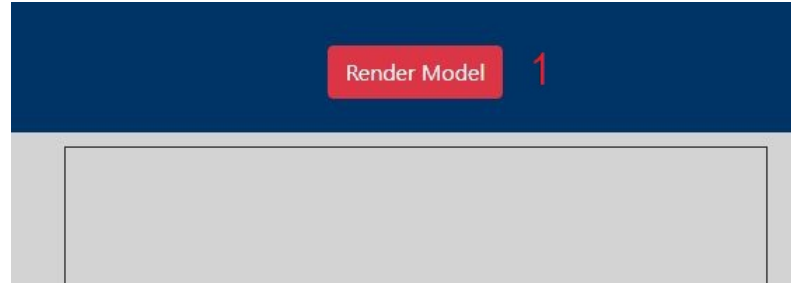
1. Click this button to load the 3D model that belongs to the patient.

2. This is the space that the 3D render will be displayed.

4.2.4 Consultation
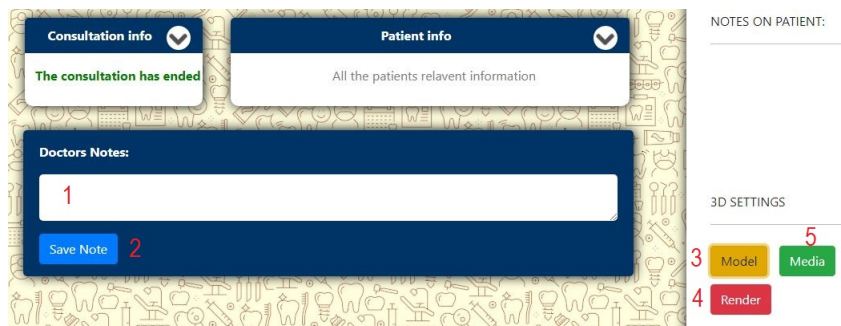
1. This is where a doctor can make notes on the patient for this consultation.

2. This button saves the notes.

3. This button opens the tab to upload a new model for the consultation.

4. This button opens the render page.

5. This button opens the tab to upload new media for the consultation.

4.2.5 New Media for a Model
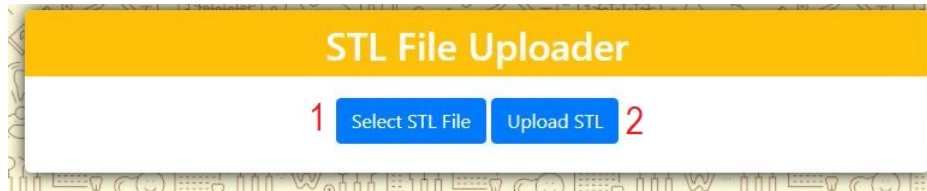
1. This opens the file browser, where the user can select an STL file.

2.Clicking this button uploads the STL file to the database on the server, where it can be used for the 3D rendering of the model.

1. This opens the file browser, where the user can select a media file (mp4).

2. Clicking this button uploads the media file to the server, where it can be used by the mesh algorithm to create the 3D model render.

3. Click this button to open the built in video streamer that is provided by the application.