Functional Specification

for

Egma Fundus Platform

Version 1.1

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EGMA

SEE A BETTER WORLD

Date:14th May 2018

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Revision History

Version	Date	Author	Reason For Changes	Reviewed By
V1.0	14/05/18	Husain Raja	First Draft	Husni Alkhufash
V1.1	15/05/18	Husain Raja	Revised Draft	Husni Alkhufash

1. Introduction

1.1 Purpose (of document)

This document describes the functional requirements for Egma Eye Testing Platform which mainly consist of two portals as of now i.e. optometrist portal and Ophthalmologist portal originally developed using php and MySQL. This document will also consist of modifications and enhancements required within the existing platform and portals.

The document is intended to provide potential suppliers with sufficient information to compile a tender document for the design and build of a new platform. The platform is to be scalable to accommodate the varying data sources i.e. MySQL, AWS Data Mart/Warehouse, etc.

1.2 Intended Audience and Primary Business Beneficiary

This document is aimed at external third party suppliers who are invited to tender for the design and build of a scraper software system.

The document is also intended for senior stakeholders within Egma plus all relevant associated business areas e.g. IT, Finance and Analytics. The main business areas to benefit are: optometrist and Ophthalmologist operations.

2. Background & Context

EGMA is a full service optical industry solutions provider dedicated to serving the needs of the MENA region. With over 40 years of proven track record and heritage, Egma partner with optical businesses of all sizes to help them grow and improve their bottom lines and profits. Business from various fronts e.g. Manufacturing and Eye care, Egma is looking for achieving operational excellence by using Technological advancements for their direct and indirect customers.

2.1.1 ASIS Situation

EGMA has collaborated with "Al Jaber" Optical unit (having multiple local stores in various locations) to provide free eye test service for eye ailment (e.g. Fundus, Cataract, etc.) to their customers using specialized camera device installed within the stores.

There are mainly two major portals i.e. one for local stores (optometrist web portal) and other for Doctors (ophthalmologist web portal) to serve the operational workflow to and fro for Optical Stores and Doctors Clinic. The URLs are as follows –

1. Optometrist Portal – *egmacare.com/Egmacare/Login_opto.php*
2. Ophthalmologist Portal – *egmacare.com/Egmacare/Login_opth.php*

High Level Operational Workflow:

1. When the new customer or prospect enters the Al Jaber stores (to buy lens/glasses/specs, etc.), their record is created in Optometrist Portal.
2. They are then offered for a free eye test (for any ailment e.g. fundus, cataract etc.)
3. Once they agree (in most cases customer agrees as the test is free); the approval note is shown to the customer and approval is taken on iPad for capturing the pictures and other info.
4. Once the approval is given; then the pictures of both the eyes are captured using the specialized handy camera device installed in each stores.
5. These images are then uploaded to the optometrist portal.
6. Once they are uploaded to the above portal; they are available in ophthalmologist portal for the Doctors clinic.
7. Doctor analyzes the images for any ailments to determine whether the customer is required to visit the clinic for further investigation. If the mages are not accurate; Doctor marks them as Repeated case to get new images. Else goes to next step.
8. If the images are passed (i.e. no ailment detected); the doctor selects the pass option in portal and submits the record. A notification is sent to the customer with info using a predefined template. Further, the store can also see the record in store's portal and closes the case.
9. If the images are failed (i.e. some ailment detected); the Doctor selects the fail option. Then stores follow up the customer for Doctors visit.
10. Then appointment date and time is fixed in Doctors portal and a notification is sent to the customer. Further, it's also visible in the Clinic that Doctor has fixed the appointment with the customer.
11. Stores follow up with the customers for appointment via calls.
12. If the customer is not available or not responding or not interested; the store closes the case in the portal.
13. If customer visits the doctor; doctor selects the appropriate option in the portal and closes the case.

Note: The following part is new and requires to be added in the new platform:

1. Customer request for the appointment directly by clicking a link for failed case.
2. Admin should be able to follow up with Customer and book an appointment directly from Admin portal in parallel to Storefront and Doctor.

2.1.2 TOBE Situation

The ASIS situation described above for Stores and Doctors clinic (i.e. Optometrist and Ophthalmologist web portals) is required to be replicated across all the areas within new platform and cater for each variation of UI, notifications and modifications. Details of the requirements are contained later in this document.

The new platform will bring the following business benefits:

- Add Traffic to the Outlets and Stores.
- Social Service for the customers.
- Increase Sales Value.
- Increase Shop Awareness.
- Interactive, Intuitive and responsive UI experience to the Customers as well as Operations.
- Optimized workflow with ease of contact creation and managing for both Store and Clinic.

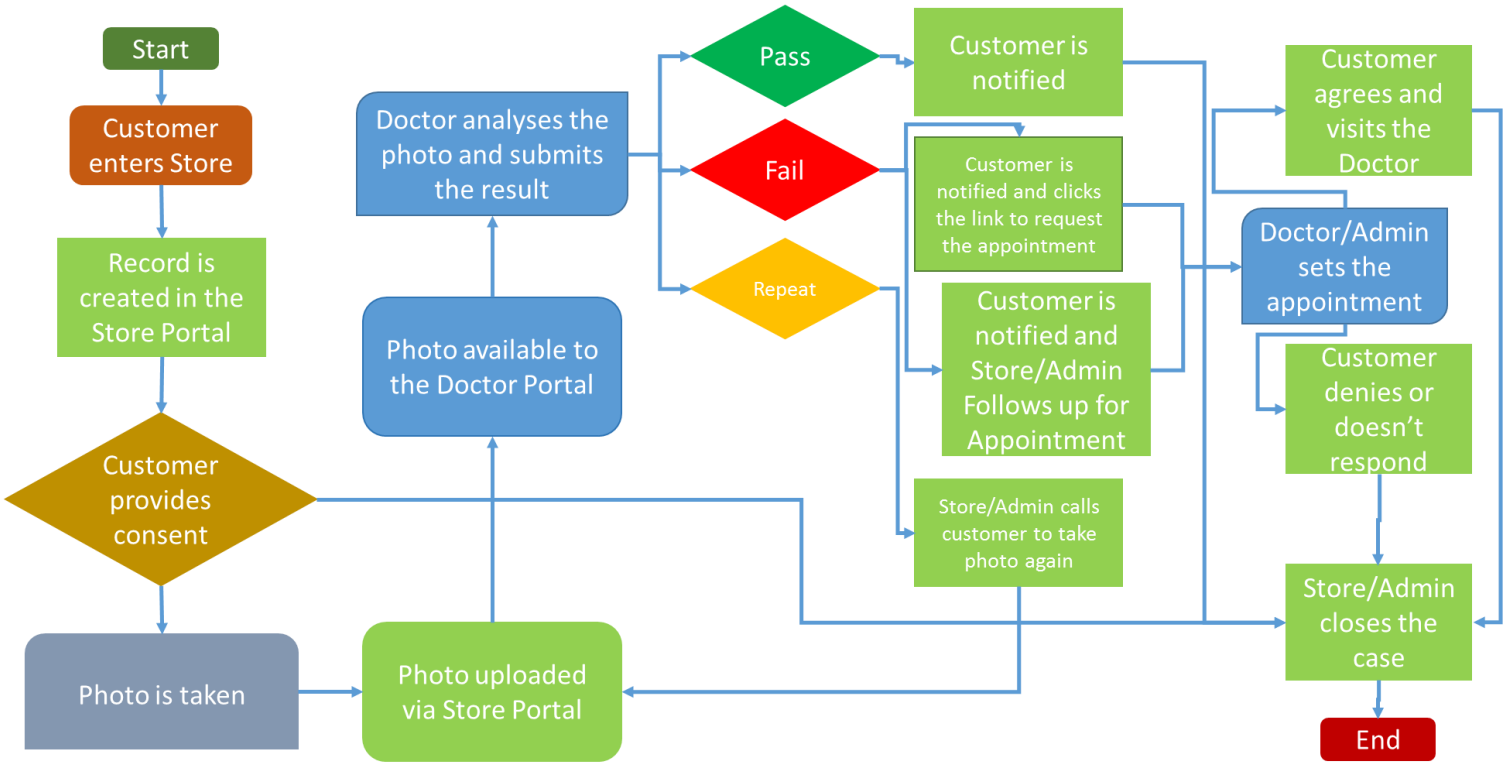
- Reduced opportunity for error with automated error handling and logging mechanism.
- Improved MI and reporting with optimized filtering options.

The new platform will consist of Optometrist, Ophthalmologist and Admin web portals which will cater to the needs at various fronts.

2.2 Additional Document References

- A functional workflow diagram of the current process.
- The product overview with the major modules and functionalities.

3. Functional Workflow



3.1 Platform / System Functions

Optometrist Portal

1. List/Add/Edit Customer
2. Take Pictures
3. Reports – Pass Cases, Fail Cases, Customer Report, Print Report.

The above workflow and functionalities are existing and needs to be modified in order to enhance the customer and operational experience.

Additional Functionalities that are required:

1. CRM – Prospects, Clients.
2. Profile (User Dropdown)
3. Alerts/Tasks (Bell Notifications)
4. Manage Cases
5. Manage Customer Documents
6. Various different Reports.
7. Interactive UI with Step by Step process to proceed.
8. Interactive wizard for first timers.

Ophthalmologist portal

1. Customers to be checked.
2. Cases with appointments.
3. History files.
4. Full Customer Report.

The above workflow and functionalities are existing and needs to be modified in order to enhance the customer and operational experience.

Additional Functionalities that are required:

1. CRM – Clients.
2. Profile (User Dropdown)
3. Alerts/Tasks (Bell Notifications)
4. Manage Appointments.
5. Manage Referrals.
6. Manage Cases.
7. Manage Customer Documents
8. Various different Reports.
9. Interactive UI with Step by Step process to proceed and wizard for first timers.

Admin Portal

1. Dashboard
2. Outlet/Store Management Module
3. User Management Module
4. Role, Access/Permission Module
5. Notification Module

6. Reporting Module
7. News/Broadcast Module
8. Outlet/Customer bulk data upload/export

3.2 Operational Scenarios

Currently, the data relation is one to many restricting only one outlet to be managed at any point. The design should adapt many to many relation consisting hierarchy approach for multiple outlets and each outlet having multiple stores.
Further, Admin should be able to play Outlet/Stores as well as Doctor/Clinics workflow steps whenever required.

3.3 Main Users and How the System will be used

The main users / beneficiaries of the system will be stores and doctors (clinic) sales/operation team. However, the admin portal will be used by both Egma and Outlets operations head to manage the various data flow.

3.4 Operating Environment & Constraints

Application would be deployed on Cloud preferably AWS in Wintel environment.

3.5 User Documentation

The user documentation requires to be done for all three portals with key functionalities and usage.

3.6 Assumptions and Dependencies

1. The current data is required to be migrated to the new Platform.
2. The current Platform is not required to be integrated and will be taken off once the new platform is in place.
3. There's no hardware device integration directly with the platform.

4. System Features

1. CRM
2. Medical Info/History of customer
3. Medical Documents (e.g. Pictures, reference doc, etc.) and document management
4. User Management and Permission
5. Storefront and Doctors Workflow Management
6. Event based Notifications
7. Reports
8. Bulk data upload/download/export

4.1 Automation within system

Event based notification needs to be handled automatically from the platform.

4.2 MI & Reporting Requirements

Identify all MI & reporting required – format, frequency, recipients

5. Non-functional Requirements

5.1 System Requirements

Application level security

- User Authentication and authorization (Login and Role based access)
- SQL injection proof

Database Level Security

- Role based access to database
- Database should be under the firewall

5.2 Safety Requirements

Not applicable

5.3 Security Requirements

Access to the Admin portal to be restricted to an identified group only.
Customer data to remain secure.

5.4 Software Quality Attributes

The Platform represents a fundamental element of Egma's E2E business process. The ability to quickly manage the data flow and workflow between the portals provides good opportunity to target multiple stores as well as customer base.

Key attributes of the Platform therefore are:

- Robust
- Perform at speed
- Ability to handle bulk data
- Data integrity / security
- Clarity of displayed data
- Ability to gather MI

5.5 Business Rules

The data held and displayed will be governed by all current internal and external regulations and policies. Any breaches of data control will be treated in line with these policies.

6. Other Requirements

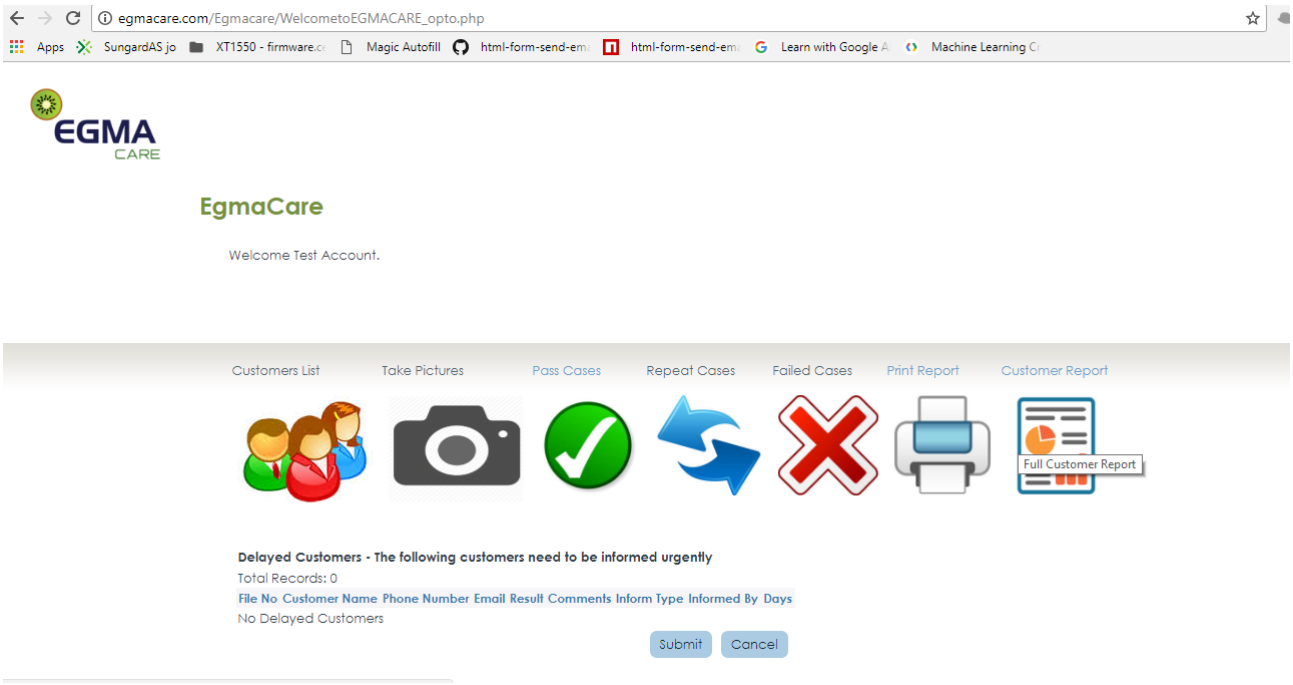
Platform support to be agreed.

7. Appendix

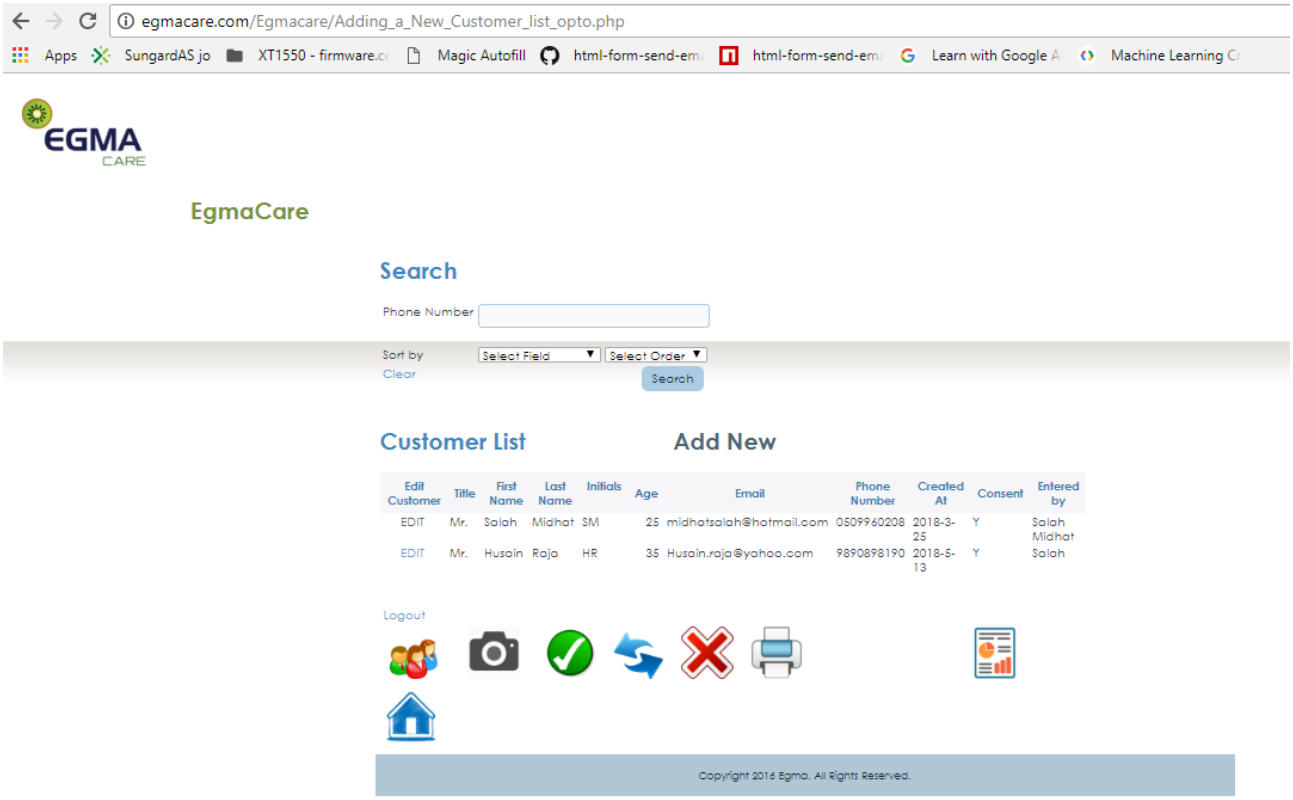
8.1 Current Web Portals

7.1.1 Optometrist Portal (Store Front)

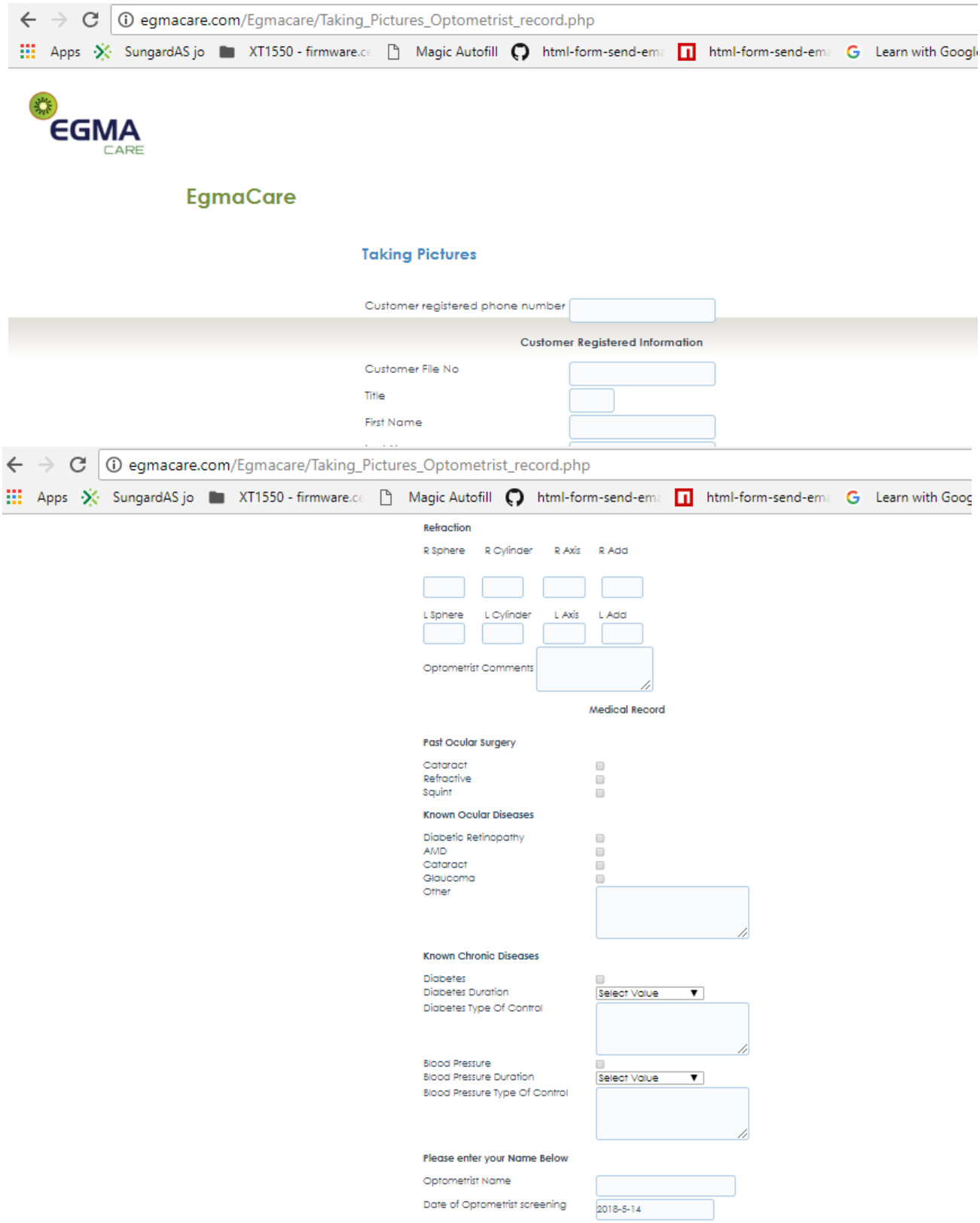
Home Page:



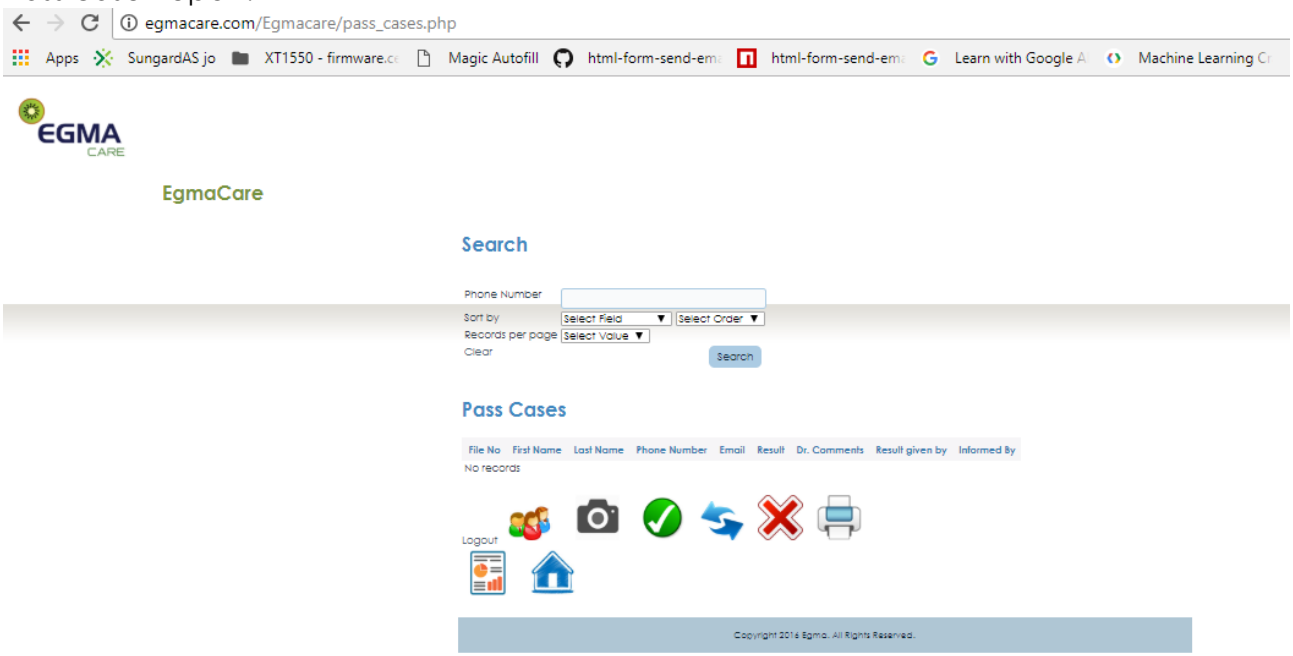
Customer List:



Taking Picture:

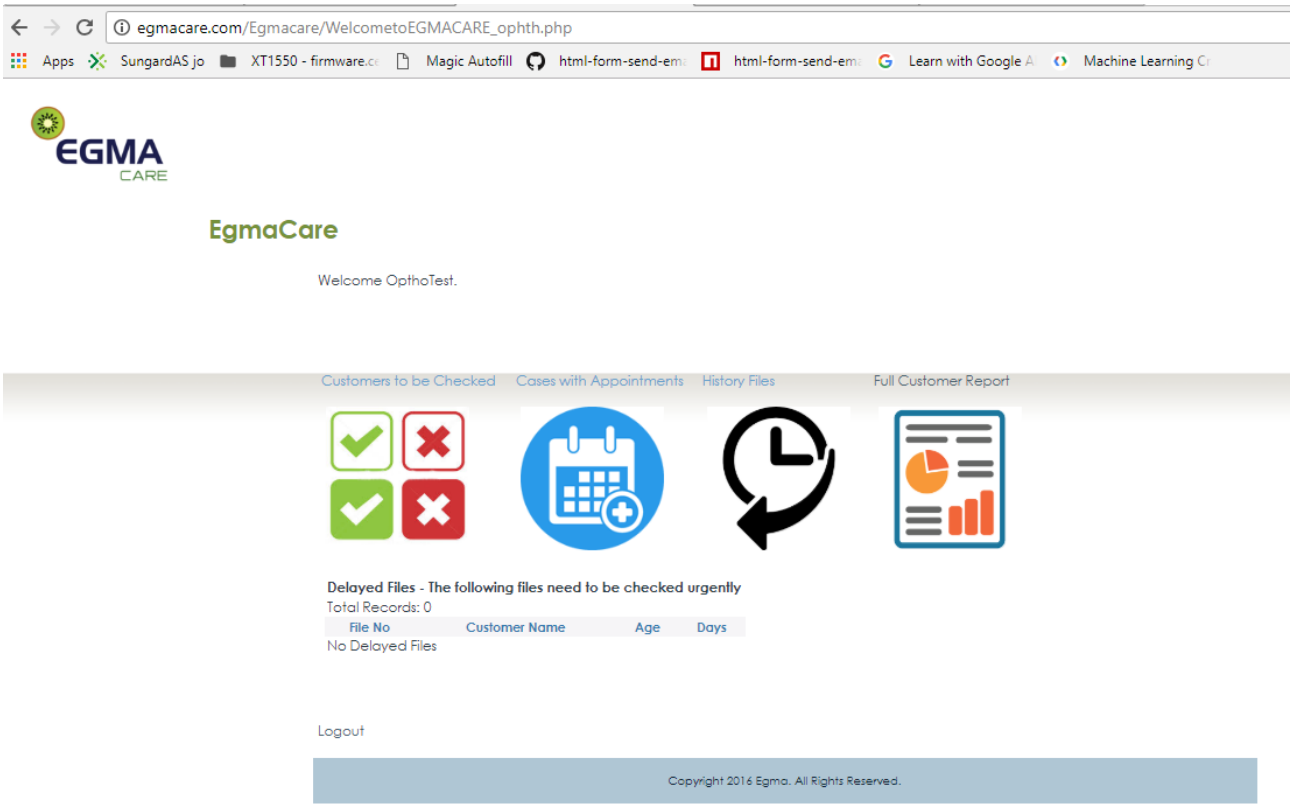
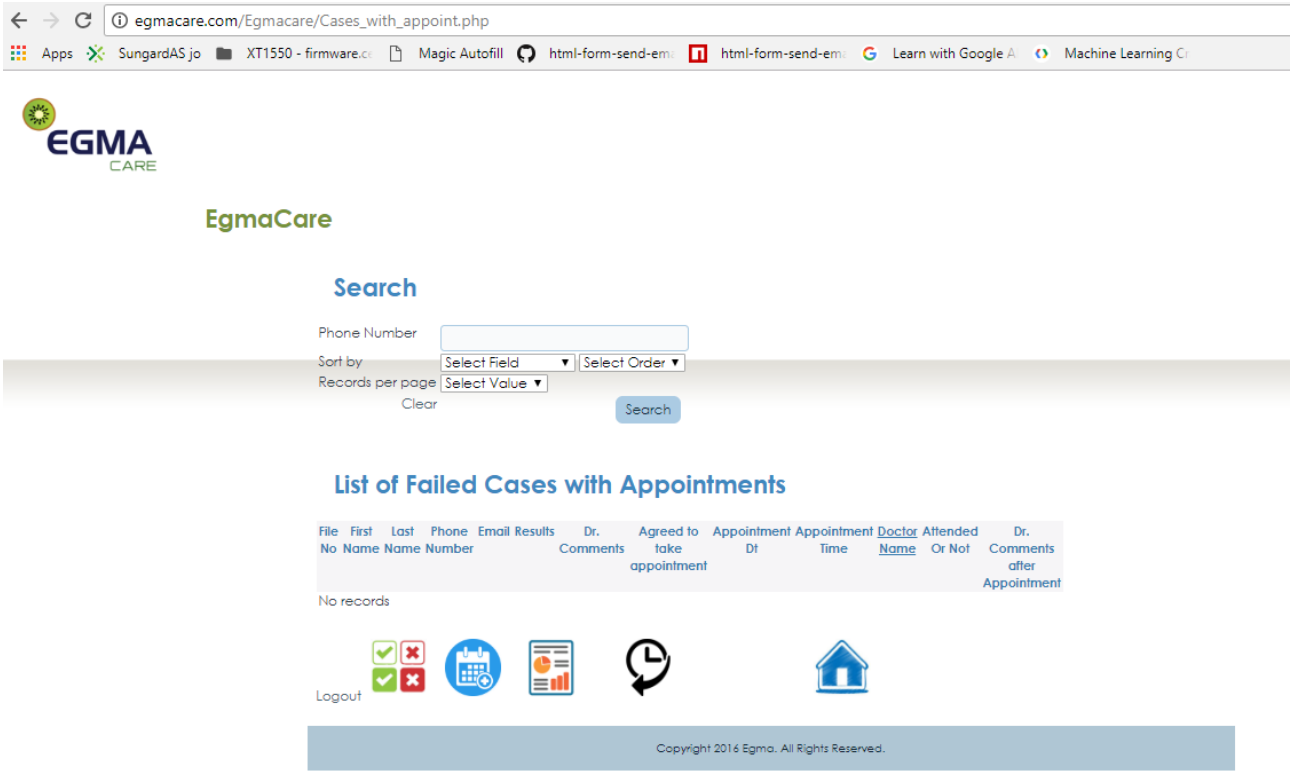


Pass case Report:



7.1.2 Ophthalmologist Portal (Doctors Portal)

Home Page:



Failed Cases: