## Ramiro Gonzalez, Gabriel Mejia, Jason Feng, Michael Mendez

1.) We have met with the client, and we are discussing the details we got from the client. Some details are that since the modern exams for doctors are over 200 years old and we would like to modernize these exams to detect symptoms of diseases faster. There is mostly an open minded perspective on how the app would need to function. Anything we find interesting and that might influence a better examination, they are acceptable to the ideas. We have to administer an eye exam to an age group of around 5 years old. Since it is better to catch eye impairments in a child that is younger, this will be a better basis for the application we are building. Somethings we need to incorporate, is to keep the 5 year old's attention to the test, since doctors have problems with younger children being super active. Another is to accurately see the movement of the child's eye, and keep the data to correlate it to other patients. The four exams we need to try to incorporate is: visual acuity( your visión in terms of depth), Eye movements( self explanatory ), pupillary reflex (dilation of light source), Optic Nerve(visual picture of the nerves on the back of the eye). We send the doctor our data and pictures of the eye's for the doctor to diagnose.

# 3.) (Michael's UML & US)

As a Doctor I would like to be able to take the results of an eye exam in order to diagnose a patient without the hassle of them coming to the doctors office.

#### Acceptance Criteria:

- All the data from the app should be easily accessible and easily available for all doctors to see symptoms through video and eye recognition through videos
- There should be access to previous videos and data to see correlations between different patients and how they relate to the disease.
- Data can be accessed through special privileges that only doctors and software engineers can access. There will be accessible data that relates symptoms to diseases and there correlations to other more serious diseases.
- This should be accessible through a password protected dropdown menu, that
  has multiple branches to all the accessible data, and a section to change new
  symptoms or criterias to the known diseases.

Use Case Name

Access Data

Participating Actor

Doctor Accessing Medical Data

**Entry Condition** 

1.) Doctor can access medical data from patients to see how they can Diagnose a certain illness through eye movements given by the apps Video recording of the patient using the app for the exam.

Flow of Events

- 2.) Doctor enters the app and uses the drop down menu to access Patients data, by first giving the proper authentication criteria.
- 3.) After authentication, the doctor is now given access to the patients Test records and videos to see the full result of eye movements in

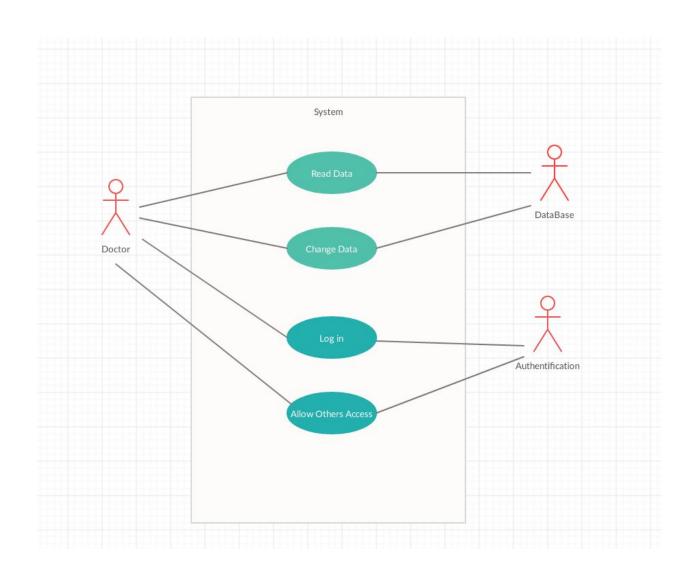
The patient's eyes.

**Exit Condition** 

4.) After the doctor is done, he then exits the database and the Database is automatically locked when exited out of the data.

Special requirements

The Doctor has to have strict authentication in order to access and The data and will be automatically locked out if exited from the data.



# Ramiro Gonzalez - (UML & US)

As a patient I am able to take the test required for diagnostic with devices I have available. I should be able to easily use the device without the need for understanding the tests.

## Acceptance Criteria:

Use Case Name Create Data - Take Exams

Participating Actor Patient creating data by taking exams

Entry Condition 1.) Patient can choose what test to take with easy to read instructions. Flow of events: 2.) Patient logs into the application, then chooses an exam to take.

3.) The application keeps track of the patient's progress.

4.) Once all have Have been completed the data that is stored,

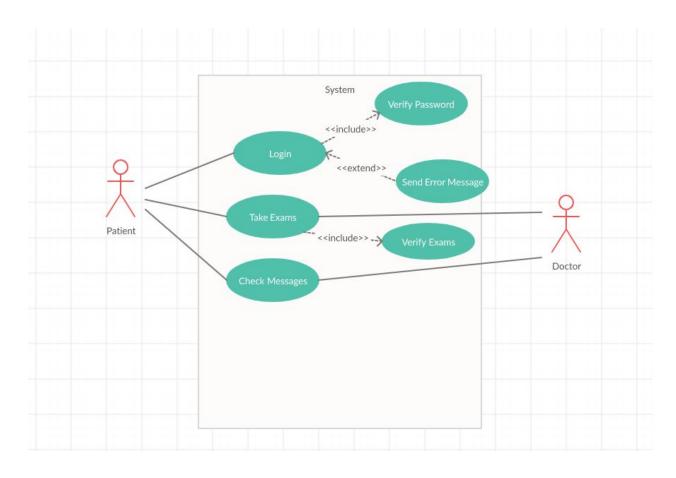
5.) Data is sent to the doctor

Exit Condition 6.) Patient completes an exam or all exams.

Special Requirement Exam data is stored in the database, the doctor is unable to make a

Diagnostic unless all exams have been completed, Doctors are able to

track the progress.



Jason Feng - (UML & US)

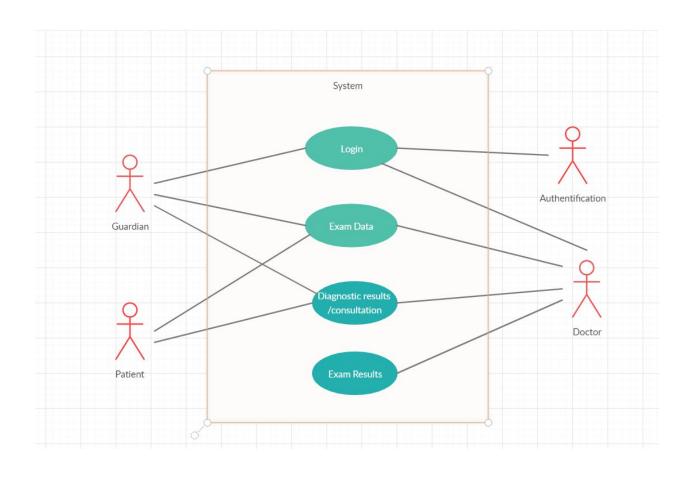
As a patient's guardian I would like to be able to facilitate eye exams of my dependent with relative ease using commonly owned devices without having to book/travel to an appointment to the optometrist.

## Acceptance Criteria:

- There should be a login feature with individual accounts to access exam and tests privately
- All exams and tests should be easily accessible and available with clear concise instructions
- There should be access to previously submitted exams taken by the dependent
- Data regarding exam results should not be accessible by the patient or the dependent through the program

Use Case Name	Create Data - Facilitate Exam
Participating Actor	Guardian Facilitates the patient creating data taking exam
Entry Condition	1.) Guardian logs into the app account on her device, the app will then
	Present her with choices of exams and instructions on how to do them
Flow of Events	2.) Guardian chooses which exam the patient should take first
	3.) The guardian then monitors the exam and ensures that it is being
	taken correctly
	4.) The program will record and log all data created by the patient
Exit condition	5.) Once completed, the guardian will have a log of exams taken and will
	Be given the option to send exam to the doctor

Special requirements- The exam results will not be available to the doctor unless the guardian chooses to send the results. The exam results are inaccessible to the Guardian and patient regardless of giving permission to doctor.



#### Gabriel Mejia - (UML & US)

As a patient or guardian I would like to administer the eye examinations or take the exams myself. I would like to have the availability to keep in direct contact with my doctor to receive results from my examinations. I would also like to take the examinations multiple times just in case the first exam I take I am not feeling my best or my child is not providing good results for the exam.

As a doctor I would like to view patient results of the exam, and keep in communication with my patients, this process will save time and money rather than having to bring the patient to the doctor's office.

#### Acceptance Criteria:

- All the data from the app should be easily accessible and easily available for all doctors to see symptoms and eye movement through videos.
- There should be access to previous videos and data to see correlations between different patients and how they relate to the deficiencies that are known by doctors in today's practice.
- Data will only be accessible through the doctor's login with administrator permissions that is enabled at the login screen, and this login will be password protected with a verification method.
- Patient will have the availability to sign into their account via the same login method.
- All exams that patients take will be password protected and patients will have the
  availability to take multiple exams just in case they are not at their best
  performance that day.
- Patients will have the availability to directly contact their doctor in regards to their results and receive push notifications to keep them updated.

Use Case Name Participating Actor login and data accessing

**Doctor Accessing Medical Data** 

**Entry Condition** 

 Doctor will choose to log in to his admin account, which will require a Username, password, and a verification code sent via text to protect The patient's data.

Flow of Events

- 2.) After Doctor has authenticated his sign in he will be presented with Patient data, descending in an order that will benefit the doctor. Within the home screen the doctor can choose a patient and view Their Exam results, messages, and case notes.
- 3.) The doctor will be able to view the exam video playback, while While making notes and choose to contact the patient furthermore For an in office exam.

**Exit Condition** 

4.) After the doctor is done examining the patients and their information The doctor will sign out locking all patient information.

Special requirements

The Doctor has to have a secure sign in method that is paired to their Phone number as a verification method when signing in.

The patient data will be automatically locked out if exited from the Admin account.

