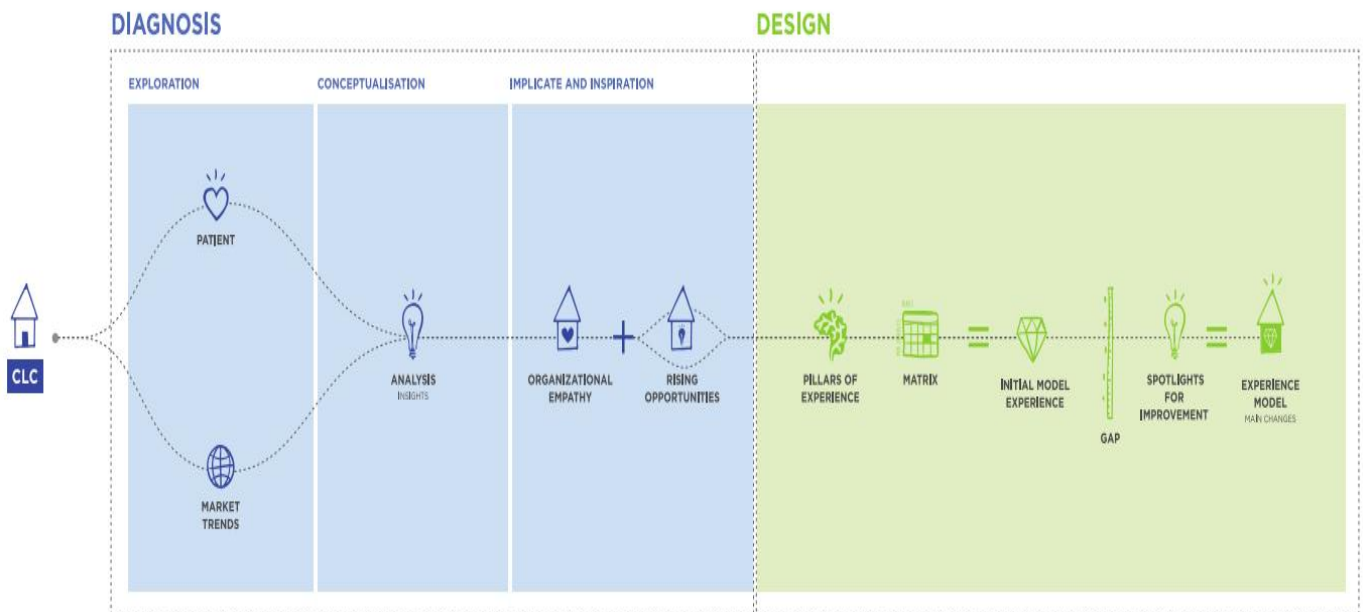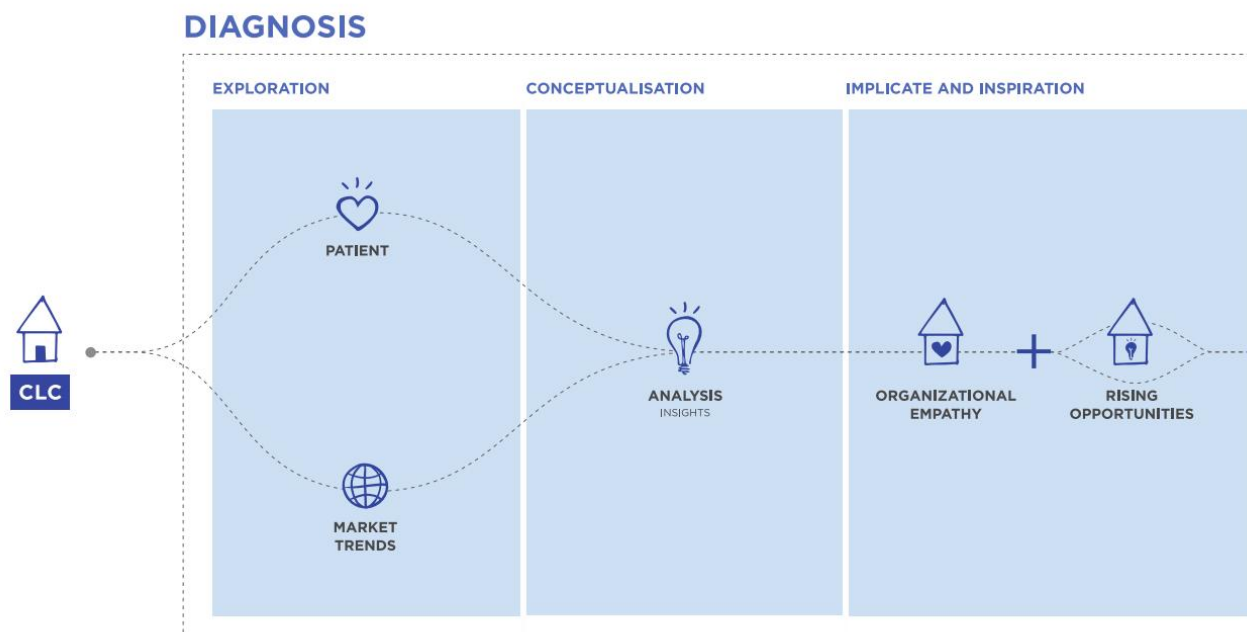Sreevarshan S
Vishwa S
Sreehari Pranesh K
Vinith Kumar S

Assignment - 4.1 : Customer journeys maps for Parkinsons Disease Detection to understand the User interactions & Experiences with the application(entry to exit)

Background Design Process:

Diagnosis:

Diagnosis part consists of:
- Exploration
- Conceptualisation

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● Implication and Inspiration

Exploration:

Exploration part is the disease detecting phase in which the disease level inside the patient is detected. Based on the level detected, the treatment is provided based on it.

Also the treatment is provided based on the present market trends available.

Conceptualisation:

Here analysis part is done in which the level of treatment and the reaction of the disease like growth of the disease (slower or fast) in the patients body is recorded here.

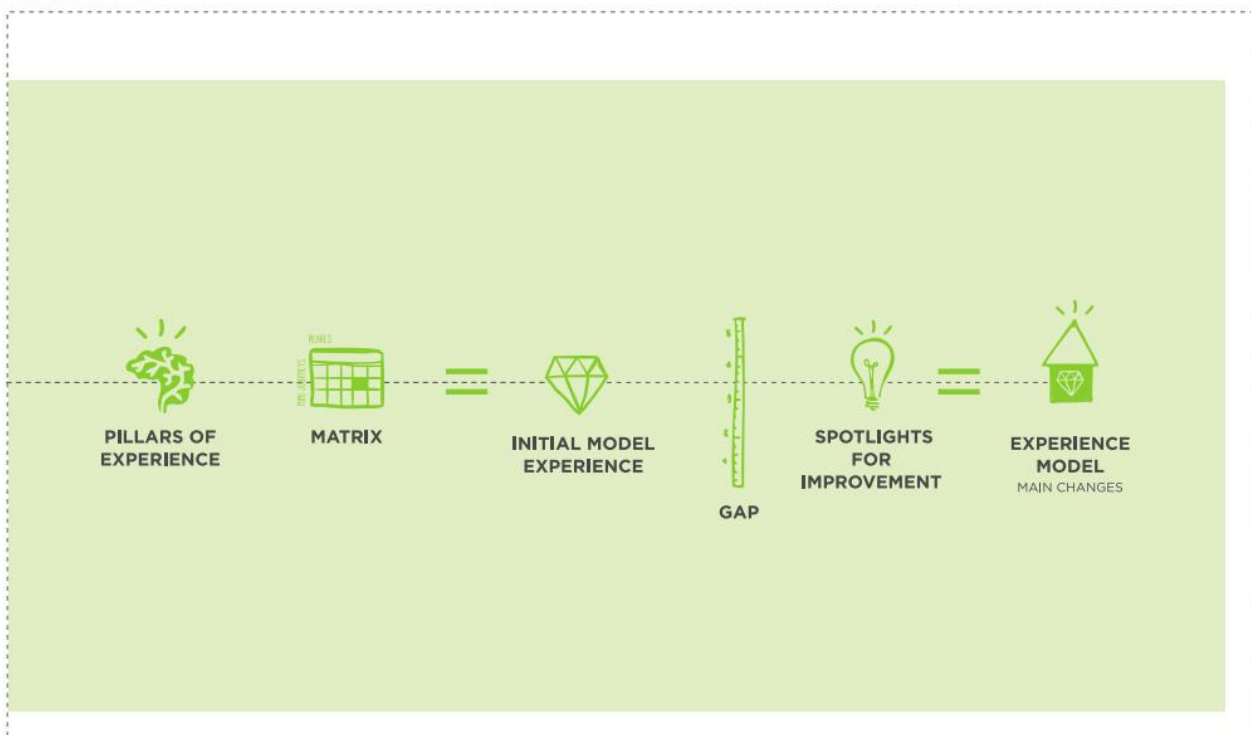The analysis part can be used for pre-processing for the model.

This process is manual.

Implication and Inspiration:

The process done here is the opportunities available to treat the disease based on the above procedures.

Design:

Preprocessing & Training:

The following preprocessing was applied to each image:
● Have trained the network on frontal handwritten images
● Resized every image to 200 × 200 pixels from the input images of random sizes
● Converted each image from RGB to GrayScale to have a single channel using cv2.cvtColor
● Thresholding the image so that it appears as white on a black background for better feature extraction using cv2.threshold

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Sreehari Pranesh K
Vinith Kumar S

- After this , HOG was used to extract features from the images by using feature.hog function
- For Spiral : RandomForestClassifier was used for fitting &
  For Wave : KNeighborsClassifier was used.