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**Project proposal - prediction model for suspected endometriosis, 19.11.2020**

**Shani Cohen -313246662**

**Naor Dahan-308399393**

**Dolev Hindi-312126642**

**Description of the proposed system:**

Preliminary stage - building a system capable of identifying endometriosis by detecting its symptoms.

Later we will expand the system so that it is capable to give reference to different types of treatment.

In the initial stage of machine learning, we will build a classifier (model) called logistic regression to be able to classify women in to labels, those who have endometriosis and those who don’t.

In the following stage, we will expand the model mentioned above to a network of neurons that will consist of: **input layers** (first layer) **hidden layers** (intermediate layers that will have an activation function) and **output layers** (the last layer).

**Dataset:**

The database was built independently.

We created a survey with about 50 symptoms that are attributed to endometriosis, which was sent to women diagnosed with this disease.

**Training set:**

The database with which we will start teaching the system is a database of women with endometriosis. A total quantity of 360 women.

Each row has a number of features(symptoms.) Each feature will be weighted.

**Test set:**

Responses of users diagnosed with endometriosis who were not part of the training database and whose symptoms were not tested by the system during the learning process.

Number of comments allocated: 240

We have downloaded the list of symptoms from the following website:

<https://www.stuffthatworks.health/team>