**Diabetes Prediction Project – She Codes Final Project Course**

**Name:** Gal Zeevy

**She Codes track:** Final Project Course

**Project description:**

Use of machine learning algorithms in order to predict if a person will have diabetes or not, based on his medical characteristics.

In the project I will work on a database that contains medical information about approximately 800 different patients, with and without Diabetes.

The project will include the following steps:

* Data Cleaning
* Handling missing values and outliers
* Anomaly detection
* Exploratory Data analysis
* Data's division to train set, validation set and test set
* Feature Engineering
* Use of different machine learning models (statistical models, decision-based tree models, neural network and other algorithms)
* Evaluation of each model separately
* Models comparison
* Ensemble of models
* The project will include visualizations on the relevant project phases

**Reason for choosing this idea:** I am interested in developing my skills in the field of predictive analytics.

**Project's language:** Python

**Background:** I have relevant academic background and work experience in programming and data analysis. I also have hands-on experience with python and its data analysis libraries: Pandas, Numpy, Matplotlib, Seaborn, Sci-kit Learn, Statsmodels and other libraries.