

Health Insurance Premium Prediction Using IBM Auto AI Service



TEAM -02



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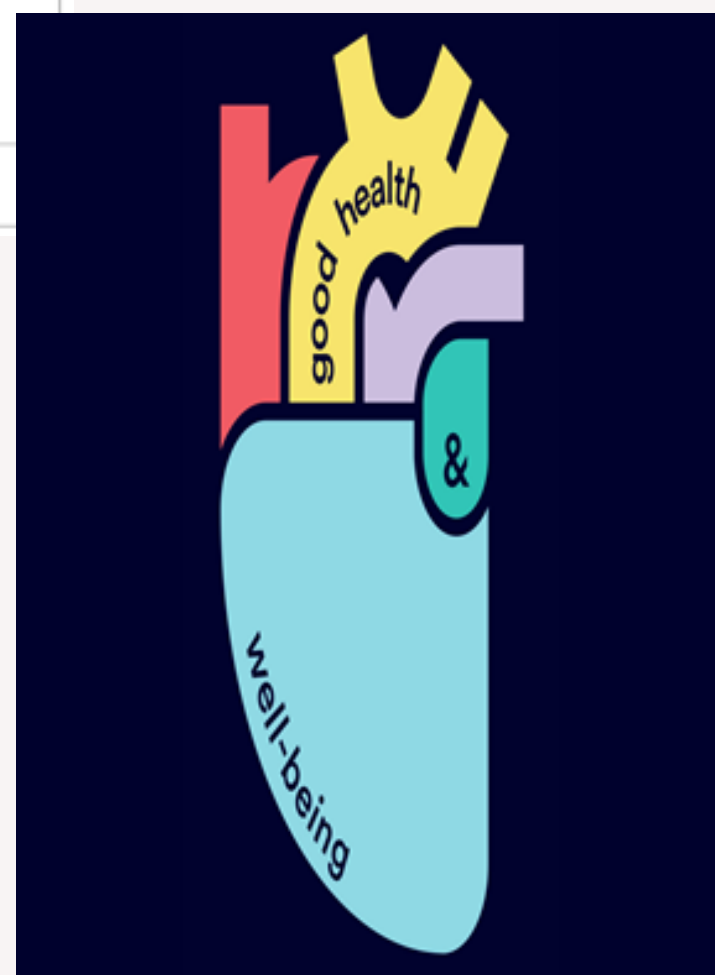


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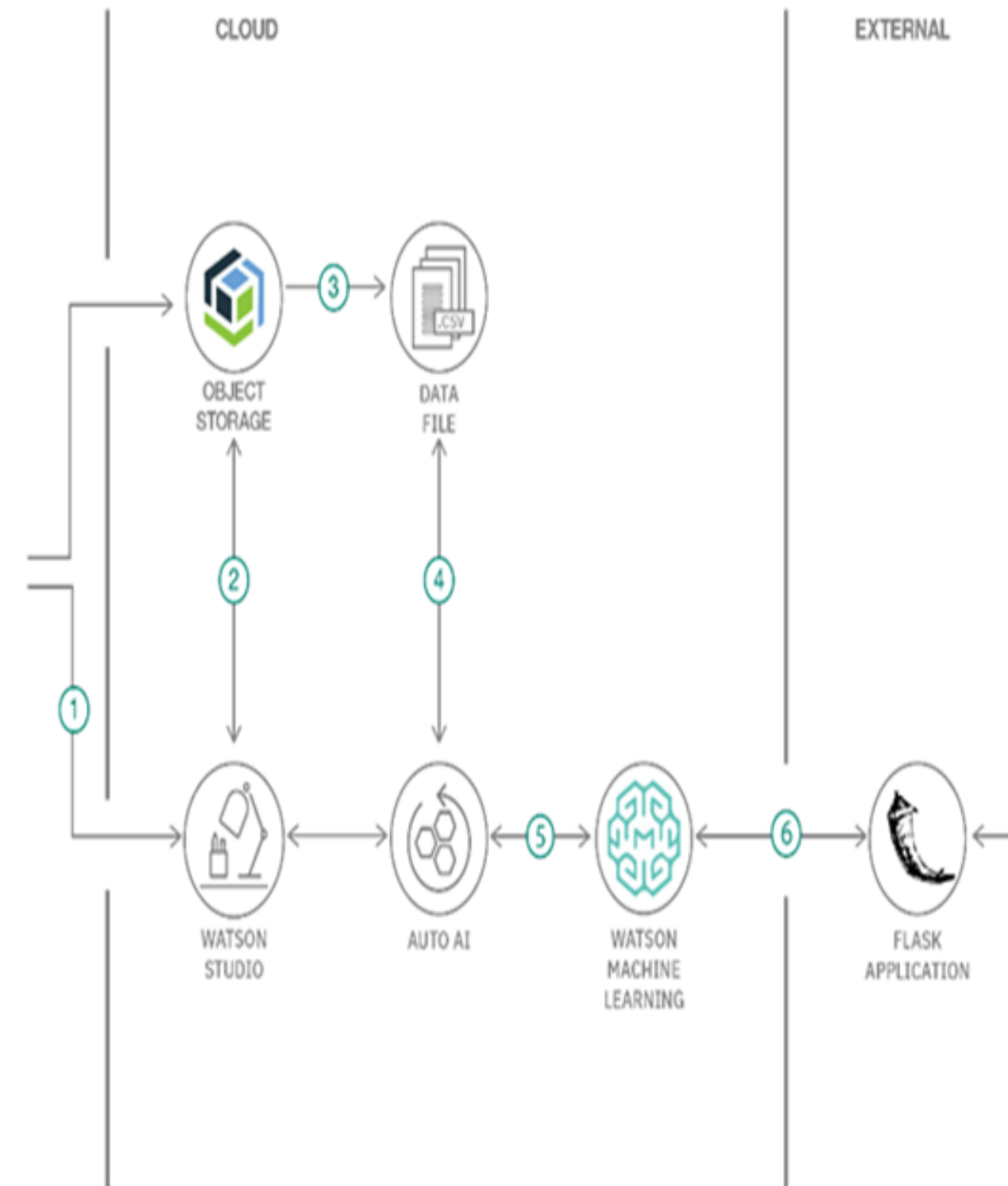
- AI increases the ability for healthcare professionals to better understand the day to day patterns and needs of the people they care for better feedback guidance and support.
- AI is already being used to detect diseases such as cancers at a very early stage.
- Technology applications and apps encourage healthier behavior in individuals and help with proactive management of healthy lifestyle





Wearable health trackers like apple, fitbit, garmin and others support heart rate and activity levels. They can send alerts to the user to get more exercise and share this information to the doctors.

1. The user creates an IBM Watson Studio Service on IBM Cloud.
2. The user creates an IBM Cloud Object Storage Service and adds that to Watson Studio.
3. The user uploads the insurance premium data file into Watson Studio.
4. The user creates an AutoAI Experiment to predict an insurance premium on Watson Studio.
5. AutoAI uses Watson Machine Learning to create several models, and the user deploys the best performing model.
6. The user uses the Flask web application to connect to the deployed model and predict an insurance charge.





- In this application, we study how age, smoking, BMI, gender, and region effects us to determine how much of a difference these factors can make on your insurance premium.
- By using our application, the customers can see the major difference in their lifestyle choices make on their insurance charges. With all this growth in the fields of data science and AI, we can quickly set up the services on IBM Cloud to build the model.
- By taking the help of artificial intelligence (AI) and machine learning, we help customers understand just how much smoking increases their premium by predicting how much they will have to pay in a short period of time (within secs). Auto Artificial intelligence generates great models quickly, which saves time and effort, and supports in a faster decision-making process.
- Here, we created a model from a data set that includes the age, gender, BMI, number of children, smoking preferences, region, and charges to predict the health insurance premium cost that each individual pays.

1.

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2.

Home

New

age *

sex *

bmi *

children *

smoker

region

SUBMIT

CANCEL

3.

Home

New

age *

34

sex *

female

bmi *

43

children *

2

smoker

no

region

southeast

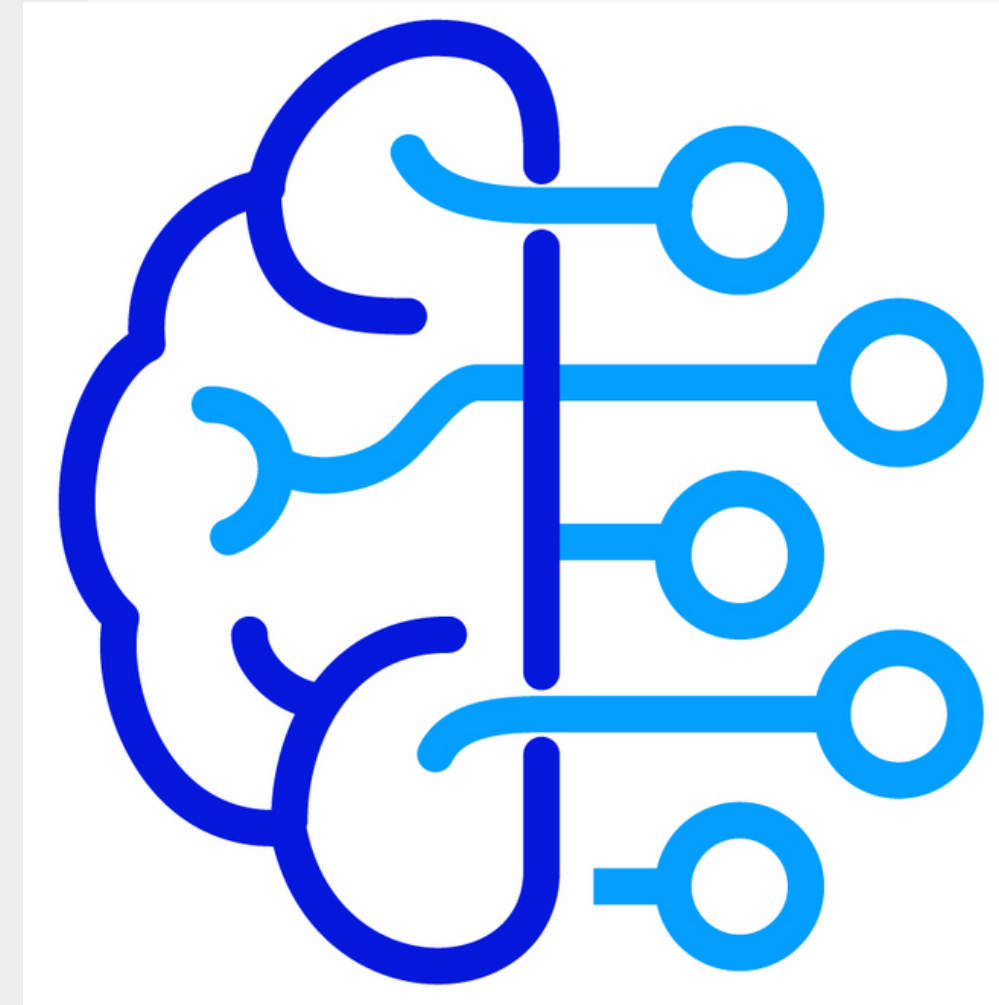
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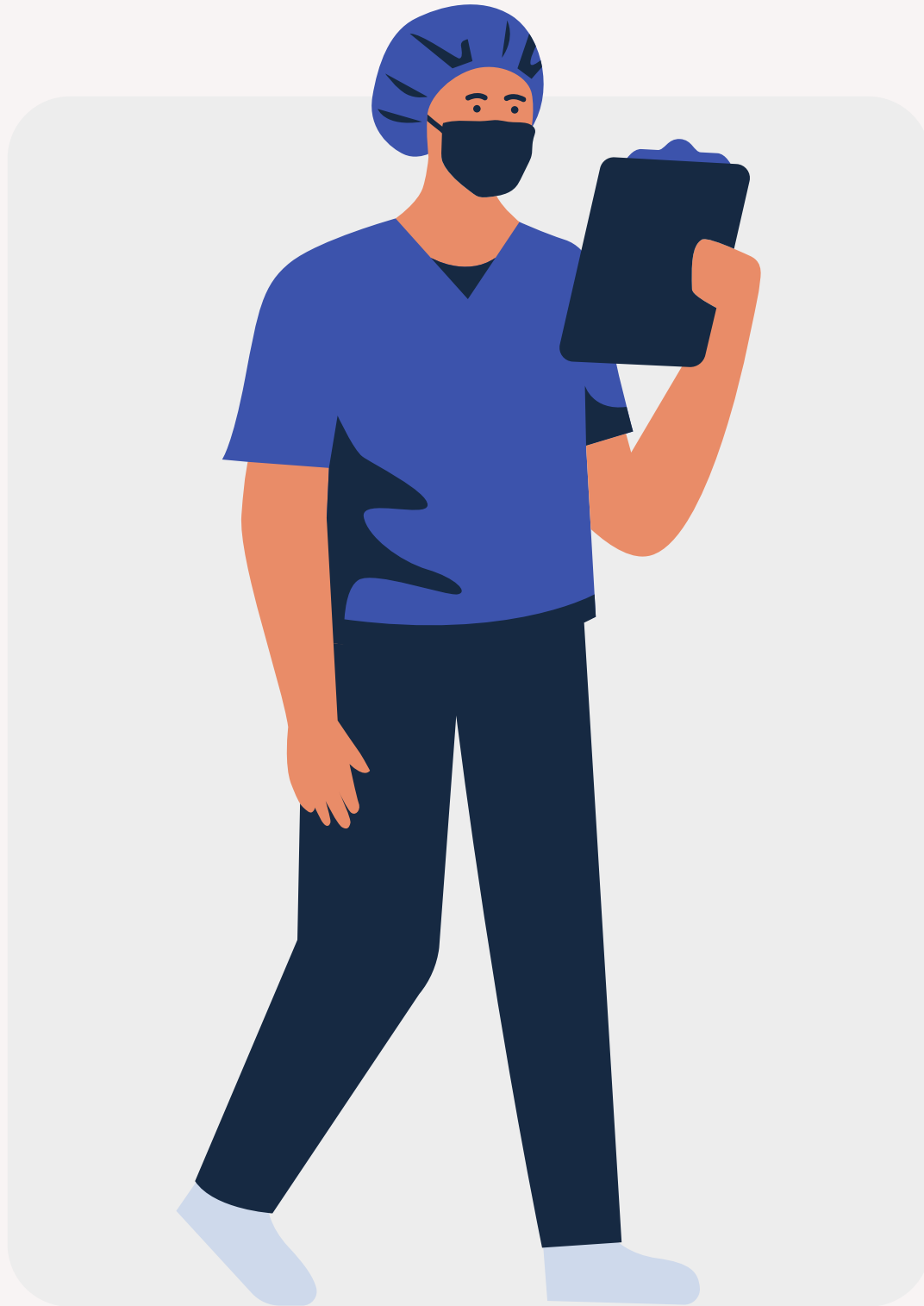
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Prediction

6639.491109034427

1. AI saves time by which we can quickly set up the services on IBM Cloud to build the model.
2. The data is used and initiates the AutoAI process
3. Build different models using AutoAI and evaluate the performance.
4. Choose the best model and complete the deployment.
5. Generate predictions using the deployed model by making REST calls.
6. Compare the process of using AutoAI and building the model manually.
7. Visualize the deployed model using a front-end application.





THANK YOU!