

# Applicant Success Predictor API

1.0.0 - OAS3

Predicts whether a student will be high-quality and likely to succeed.

Servers

https://intarsnet.swaggerhub.com/joshHuang02team-boba-lw41.0.0 - Swaggerhub API Auto Mocking

predict

Predict application success

POST /predict Predict a student's success by ID.

Using a ML model based on the parameters: `studytime`, `failures`, `absences`, `G1`, and `G2`, predict the quality of the student, specifically: `G3`. A student predicted to have a `G3` grade of 15 or higher is high-quality.

Parameters

No parameters

Try it out

Request body

application/json

Optional description in Markdown

Example Value Schema

```
{  "studytime": 18,  "failures": 4,  "absences": 93,  "G1": 20,  "G2": 20}
```

Responses

Code	Description	Links
200	successful operation	No links
400	Invalid values supplied	No links
404	Values not found	No links

default

Train the student success predicting ML model.

POST /train Train the student success predicting ML model.

Train the ML model over a historical dataset (`data@student-mat.csv`) of student performance. Our ML model uses 5 inputs from the dataset: `studytime`, `failures`, `absences`, `G1`, and `G2`. The target performance metric of our model is `G3`. The data is in JSON format.

Parameters

No parameters

Try it out

Responses

Code	Description	Links
200	successful operation	No links

POST /clean Clean the dataset in preparation to train the ML model.

Before training our ML model on a dataset, we should clean the data. Remove corrupt, incorrect, or unnecessary data from the dataset (`data@student-mat.csv`), so that our ML model will have greater success.

Parameters

No parameters

Try it out

Responses

Code	Description	Links
200	successful operation	No links

POST /test Test how the ML model performs.

Run tests to test the classifier accuracy of our ML model.

Parameters

No parameters

Try it out

Responses

Code	Description	Links
200	successful operation	No links

Schemas

Predict

{ "studytime": Integer, "failures": Integer, "absences": Integer, "G1": Integer, "G2": Integer}