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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Instructions:**  Evaluate the homework against the outlined criteria in the below rubric, assigning a rating to each criterion. Add points earned across all criteria and convert the total points to a letter grade, assigning a “+” or “-” letter grade designation at your discretion. | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | A (+/-) | 55+ | C (+/-) | 25-39 | F (+/-) | <10 | | B (+/-) | 40-54 | D (+/-) | 10-24 |  |  | |
| **Notes:**  The deployed assignment utilizes the **sklearn** library to train models on a set of data and used to make predictions. The source code should also be deployed to **Github** or **Gitlab**. |  |

**Rubric for Predicting Credit Risk :**

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| --- | --- | --- | --- | --- | --- |
|  | **Mastery**  **20 points** | **Approaching Mastery**  **15 points** | **Progressing**  **10 points** | **Emerging**  **5-0 points** | **Incomplete** |
| **Data Preprocessing** | The submission does all of the following:  ✓ Data is correctly split into a training and test set.  ✓ Categorical features are converted to numeric with get\_dummies  ✓ Missing categorical features in the testing data are filled in programmatically  ✓ Data is scaled with StandardScaler. | The submission does 3 of the following:  ✓ Data is correctly split into a training and test set.  ✓ Categorical features are converted to numeric with get\_dummies  ✓ Missing categorical features in the testing data are filled in programmatically  ✓ Data is scaled with StandardScaler. | The submission does 2 of the following:  ✓ Data is correctly split into a training and test set.  ✓ Categorical features are converted to numeric with get\_dummies  ✓ Missing categorical features in the testing data are filled in programmatically  ✓ Data is scaled with StandardScaler. | The submission does 0-1 of the following:  ✓ Data is correctly split into a training and test set.  ✓ Categorical features are converted to numeric with get\_dummies  ✓ Missing categorical features in the testing data are filled in programmatically  ✓ Data is scaled with StandardScaler.  -OR-  ✓ No preprocessing done. | No submission was received  -OR-  Submission was empty or blank  -OR-  Submission contains evidence of academic dishonesty |
| **Reflection and Reporting** | The submission does all of the following:  ✓ Makes a prediction on which model will perform better on the *unscaled* data. The prediction is made with adequate justification. (Note: no points are removed for predictions that prove to be incorrect).  ✓ Makes a prediction on which model will perform better on the *scaled* data. The prediction is made with adequate justification. (Note: no points are removed for predictions that prove to be incorrect).  ✓ Makes a comparison between predicted behavior of the models on unscaled data and the actual results.  ✓ Makes a comparison between predicted behavior of the models on scaled data and the actual results. | The submission does 3 of the following:  ✓ Makes a prediction on which model will perform better on the *unscaled* data. The prediction is made with adequate justification. (Note: no points are removed for predictions that prove to be incorrect).  ✓ Makes a prediction on which model will perform better on the *scaled* data. The prediction is made with adequate justification. (Note: no points are removed for predictions that prove to be incorrect).  ✓ Makes a comparison between predicted behavior of the models on unscaled data and the actual results.  ✓ Makes a comparison between predicted behavior of the models on scaled data and the actual results. | The submission does 2 of the following:  ✓ Makes a prediction on which model will perform better on the *unscaled* data. The prediction is made with adequate justification. (Note: no points are removed for predictions that prove to be incorrect).  ✓ Makes a prediction on which model will perform better on the *scaled* data. The prediction is made with adequate justification. (Note: no points are removed for predictions that prove to be incorrect).  ✓ Makes a comparison between predicted behavior of the models on unscaled data and the actual results.  ✓ Makes a comparison between predicted behavior of the models on scaled data and the actual results. | The submission does 0-1 of the following:  ✓ Makes a prediction on which model will perform better on the *unscaled* data. The prediction is made with adequate justification. (Note: no points are removed for predictions that prove to be incorrect).  ✓ Makes a prediction on which model will perform better on the *scaled* data. The prediction is made with adequate justification. (Note: no points are removed for predictions that prove to be incorrect).  ✓ Makes a comparison between predicted behavior of the models on unscaled data and the actual results.  ✓ Makes a comparison between predicted behavior of the models on scaled data and the actual results. |
| **Model Creation** | The submission does all of the following:  ✓ Creates, trains, and scores a LogisticRegression model on unscaled data  ✓ Creates, trains, and scores a LogisticRegression model on scaled data  ✓ Creates, trains, and scores a RandomForestClassifier model on unscaled data  ✓ Creates, trains, and scores a RandomForestRegression model on scaled data | The submission does 3 of the following:  ✓ Creates, trains, and scores a LogisticRegression model on unscaled data  ✓ Creates, trains, and scores a LogisticRegression model on scaled data  ✓ Creates, trains, and scores a RandomForestClassifier model on unscaled data  ✓ Creates, trains, and scores a RandomForestRegression model on scaled data | The submission does 2 of the following:  ✓ Creates, trains, and scores a LogisticRegression model on unscaled data  ✓ Creates, trains, and scores a LogisticRegression model on scaled data  ✓ Creates, trains, and scores a RandomForestClassifier model on unscaled data  ✓ Creates, trains, and scores a RandomForestRegression model on scaled data | The submission does 0-1 of the following:  ✓ Creates, trains, and scores a LogisticRegression model on unscaled data  ✓ Creates, trains, and scores a LogisticRegression model on scaled data  ✓ Creates, trains, and scores a RandomForestClassifier model on unscaled data  ✓ Creates, trains, and scores a RandomForestRegression model on scaled data  -OR-  ✓ Only uses non-classification models. |