



FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
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BITI 3533
ARTIFICIAL INTELLIGENCE PROJECT MANAGEMENT
LECTURER: PROF. TS. DR. BURHANUDDIN BIN MOHD ABOOBAIDER
PROJECT: CAR PRICE PREDICTION USING ANN

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Introduction - Background and Case Study

Our project title is Car Price Prediction using ANN. This project/model is being developed to predict customers' budget for purchasing a car based on their background and economic state such as salary, debt, and net worth. This project will be useful for car salespeople and dealers to predict customers' budgets when they want to buy a car. This will also help them sort out budget-friendly cars for their respective customers. Financial institutions like banks can estimate the amount of car loans to approve when a particular customer wants to purchase a car.

Detail about the software used

To develop this project, our team has chosen the Python programming language as it is easy to understand and easy to implement neural nets such as ANN. We use PyCharm for writing codes, and debugging and compiling Python codes, as the process of ANN model building for Car Price Prediction. To draft the ANN architecture, we used Drawio to make it a diagram. We also used Google Colaboratory to reduce the training time of the model as it works in a cloud computing way and uses fewer computer resources, resulting in faster model building. To evaluate the model we generate several plots such as actual vs predicted values, training and validation loss and mean absolute error using Google Colaboratory.

Detail on AI project management

In this project, we utilized the AI project management method from start to end of this project, which consists of five main processes as following:

a) Initiating processes

The purpose of this phase is to assign the project manager and to identify who are the key stakeholders for this project. In this phase, we define and authorize our project using two main documents as following:

- **Business case**
A business case explains why we need to do the project, where it consists of the project definition, summary, mission statement, product/services, and also the organization for the assigned project. A business case defines the value that the project is expected to deliver.
- **Project charter**
A project charter is a short but precise document that outlines the project's key goals, stakeholders, purpose, available resources, potential risks, and milestones of the project. Project charters are an essential part of the project documentation process, as they provide the proof of approval to begin project work and utilize business resources. The project charter acts as a record of stakeholder approval while documenting essential information about the project itself.

b) Planning processes

The purpose of this phase is to guide the project execution. Several documents will be prepared for this phase as follows:

- Work breakdown structure

A work breakdown structure (WBS) is a project management tool that breaks down the project into smaller components and integrates scope, cost, and deliverables. It makes it easier for team members to identify their jobs in the project.

- Scope statement

A scope statement defines the detailed written outline of the project. It consists of a project description, objectives, deliverables, boundaries, and requirements. project scope statement will act as the primary tool for stakeholders and teammates to reference and use as a guideline to accurately measure project success.

- Project schedule

An extensive timeline outlining the tasks, activities, and deadlines necessary to finish a project is called a project schedule. We used the Gantt Chart to visualize our project's schedule.

- Cost estimate

A Cost estimate is a quantified expectation of how many resources are required to complete a project or parts of a project. Below are the sub-documents that is used for cost estimation:

- Net Present Value

The difference between the present value of cash inflows and outflows over a specific time is known as the net present value or NPV. It's a critical metric for assessing a project's potential profitability.

- Return on investment

A metric called return on investment (ROI) is used to indicate how much profit has been made from an investment.

- Payback analysis

Payback analysis is a mathematical method used to determine how long it may take to start, complete, and pay for a project's investment/capital.

- Internal Rate of return

Internal Rate of return can be defined as the rate at which cash inflows equal cash outflows without consideration of external factors.

c) Executing processes

It takes the most time and resources to perform project execution. The following tasks are done in this phase:

- **Coding**
The model that is built for this project is coded using Python programming language and the neural network model that is used for this code is ANN. The main aspects that summarize the code are data input, data preprocessing, feature selection, normalization, train test split, use of ANN architecture, adding activation function, optimizer usage, and model performance evaluation.
- **Flowchart**
The flowchart consists of all the processes made in the model development which are data input, data preprocessing, feature selection, normalization, train test split, use of ANN architecture, adding activation function, optimizer usage, and model performance evaluation.
- **Dataset**
The dataset is in the file named car_purchasing.csv is the data of 500 customers from various background, origins and their details like name, email, country, gender, age (0:Male, 1:Female), annual salary, credit card debt, net worth, and also their car purchase amount. Based on the details, this dataset consists of 500 sample data of 9 columns (name, email, country, gender, age, annual salary, credit card debt, net worth, car purchase amount). The data is continuous data for age, annual salary, credit card debt and net worth. Gender is nominal data. Name, email and country are qualitative data. Based on the data source page, this dataset will be useful in creating a model that could estimate how much the amount a customer would spend for purchasing a car based on the features given. The dataset can be downloaded from the link:
<https://www.kaggle.com/datasets/yashpaloswal/ann-car-sales-price-prediction/download?datasetVersionNumber=1>
- **Model development**
Model development is done by splitting the dataset for training and testing, then feed those data to the model to be developed. Training using training data, the model trained using training data is tested with testing data. Typically, the data is divided into a larger training set (e.g., 70-80%) and a smaller testing set (e.g., 20-30%). The training set will be used to train the ANN model, while the testing set will be used to evaluate its performance. We split the data into training and testing sets. The model is built on the training data and evaluated on the testing data. The test size = 0.2 means that 20% of the data will be used for testing, and the rest for training. Random state = 0 is used for initializing the internal random number generator, which will decide the splitting of data into train and test indices
- **Training and testing**
This is the function that trains the model for a fixed number of epochs (iterations on a dataset). It returns a History object. Its attribute is a record of training loss values and

metrics values at successive epochs, as well as validation loss values and validation metrics values (if applicable). This is the number of times the learning algorithm will work through the entire training dataset. One epoch means that each sample in the training dataset has had an opportunity to update the internal model parameters. An epoch is a measure of the number of times all of the training vectors are used once to update the weights. This is the fraction of the training data to be used as validation data. The model will set apart this fraction of the training data, will not train on it, and will evaluate the loss and any model metrics on this data at the end of each epoch. This can be useful to check for overfitting, which is when the model learns the training data too well and performs poorly on new, unseen data. From this step make the prediction based on the output of that. To make a prediction, use This code to calculate the R-squared score, also known as the coefficient of determination, to evaluate the performance of the model on the test data. It takes two arguments to test and predict. The test represents the true target values from the test dataset, and the prediction represents the predicted target values generated by the trained model. The R-squared score measures how well the model's predictions align with the actual values. It ranges from 0 to 1, with 1 indicating a perfect fit.

d) Monitoring and controlling processes

Measuring progress toward the project objectives, monitoring deviation from the plan and taking corrective action to match progress with the plan, using the following document format:

- Performance reports
Project performance reports are a way to measure the various project metrics to see if you're moving in the right direction. They also act as a communication tool informing stakeholders on the progress of the project, who get a more general report on milestones. This report helps us to monitor the performance of each task assigned to people involved in the project.
- Requested changes
A change request form is a form used to request, approve, and track project-related changes. We need to specify who requested the change and its description, reason to change, change's priority and the impact of the changes towards the deliverables.
- Updates on plan
Updates on plan refers to the update that we do in the existing plan, based on the changes requested by people involved in the project. This is to ensure to keep track of the updates that we made in the plan and look for its accomplishment.

e) Closing processes

This phase involves gaining stakeholder and customer acceptance of our model of this project.

The outputs of this phase are:

- Final report
A final project report is a document that records the services, results, and performance of a project. It is prepared at the end of the project to officially communicate its closure and to assess its success from the organization's perspective. It also documents the history of

the project, its strengths and weaknesses, and the lessons learned. It is a useful tool for evaluating and improving future projects.

- Project archives

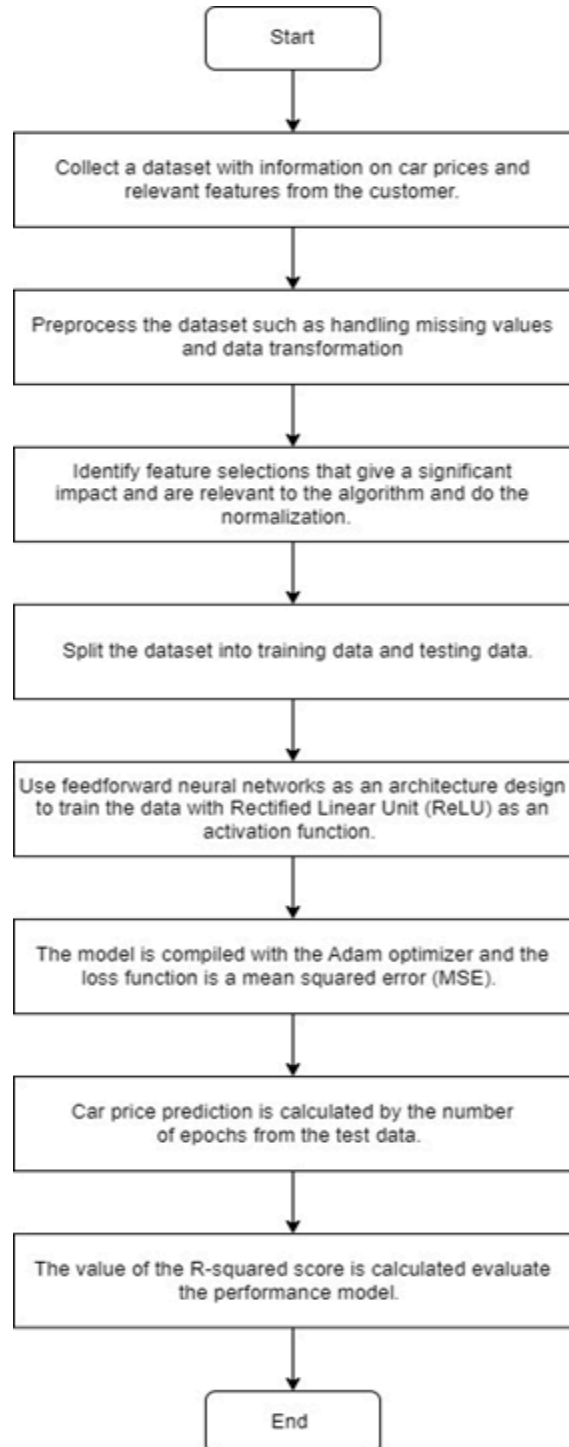
A project archive refers to the systematic storing of project artifacts such as project charter, work breakdown structure, cost estimate, performance report and so on at the close of a project, that is related to our project.

- Lesson learned

Lessons learned project management is a strategy that evaluates the experiences of a project team, both positive and negative, to identify areas for improvement and best practices for future projects. This is to help avoid repeating mistakes, use opportunities, and improve project quality.

Flow, algorithm, and problem-solving

Below is the flow of the model building of this project:



The problem that needs to be solved is that we need to predict the price of a car that an individual could or safely spend based on their background. Their background is evaluated using their age, annual salary, credit card debt and net worth.

Project implementation and output

i) Project implementation

To implement this project, we used Google Colaboratory for full coding using Python Programming Language. To train the model, we used a train test split. MinMaxScaler is used to scale the data used for this project/model building. To build the model, we used a Sequential model with ReLU and linear activation function as this is a MLP model. Then the model is compiled with ADAM optimizer and trained using 100 epoch size. Then the built model is tested using testing data. The model is then used to predict the price of the car that an individual could or is safe to spend based on their age, annual salary, credit card debt, and net worth.

Full code implementation is in the link below:

 [Car Price Prediction Using Multi-Layer Perceptron.ipynb](#)

ii) Output

The built model will work similarly as shown below:

```
Model Usage

age = input("Enter Age: ")
annual = input("Enter Annual Salary: RM")
ccdebt = input("Enter Credit Card Debt: RM")
worth = input("Enter Net Worth: RM")

user_input = {
    'age': age,
    'annual Salary': annual,
    'credit card debt': ccdebt,
    'net worth': worth
}

user_df = pd.DataFrame([user_input])
user_input_scaled = x_scaler.transform(user_df)
user_pred_scaled = model.predict(user_input_scaled)
user_pred = y_scaler.inverse_transform(user_pred_scaled)
print("Average Price: RM", "%.2f" % user_pred[0][0])

Enter Age: 30
Enter Annual Salary: RM120000
Enter Credit Card Debt: RM1800
Enter Net Worth: RM100000
1/1 [=====] - 0s 19ms/step
Average Price: RM 59583.67
```

The required details are age, annual salary, credit card debt and net worth. When users input these details, it uses a pre-trained model to predict the average price for a car that the person is safe to spend to purchase them.

Conclusion

In conclusion, automobile makers and industry experts have access to a powerful tool for making profitable pricing decisions: car price prediction using artificial neural networks (ANN). ANN models can efficiently estimate automobile pricing based on a variety of pertinent features, such as brand, model, engine specifications, fuel efficiency, mileage, and production year, through the use of machine learning techniques. The case study included a step-by-step breakdown of the learning and analysis procedures used to estimate car prices using ANN. The study focused on handling missing values, reducing outliers, and normalizing numerical features, starting with data collection and preprocessing. The possibility for improving the model's prediction ability through the development of derived features or transformations was highlighted during the discussion of feature engineering techniques. Important tasks included choosing a proper architecture, activation functions, and regularization strategies during the ANN model's construction and training. Backpropagation is an optimisation approach that was used to train the model, and metrics like mean absolute error (MAE), mean squared error (MSE), and R-squared (R^2) were used to assess the model's performance. The evaluation procedure made it possible to analyze the model's precision and prediction ability in great detail. Any performance problems were advised to be fine-tuned, including altering the network structure or changing hyperparameters. Once the model had proven to operate satisfactorily, it could be used to forecast car costs in new situations, allowing automakers to make data-driven pricing decisions. To maintain the deployed model's accuracy and dependability over time, it was important to emphasize continuous monitoring and maintenance. To capture changing market trends and consumer preferences, the model should be periodically updated with fresh data.

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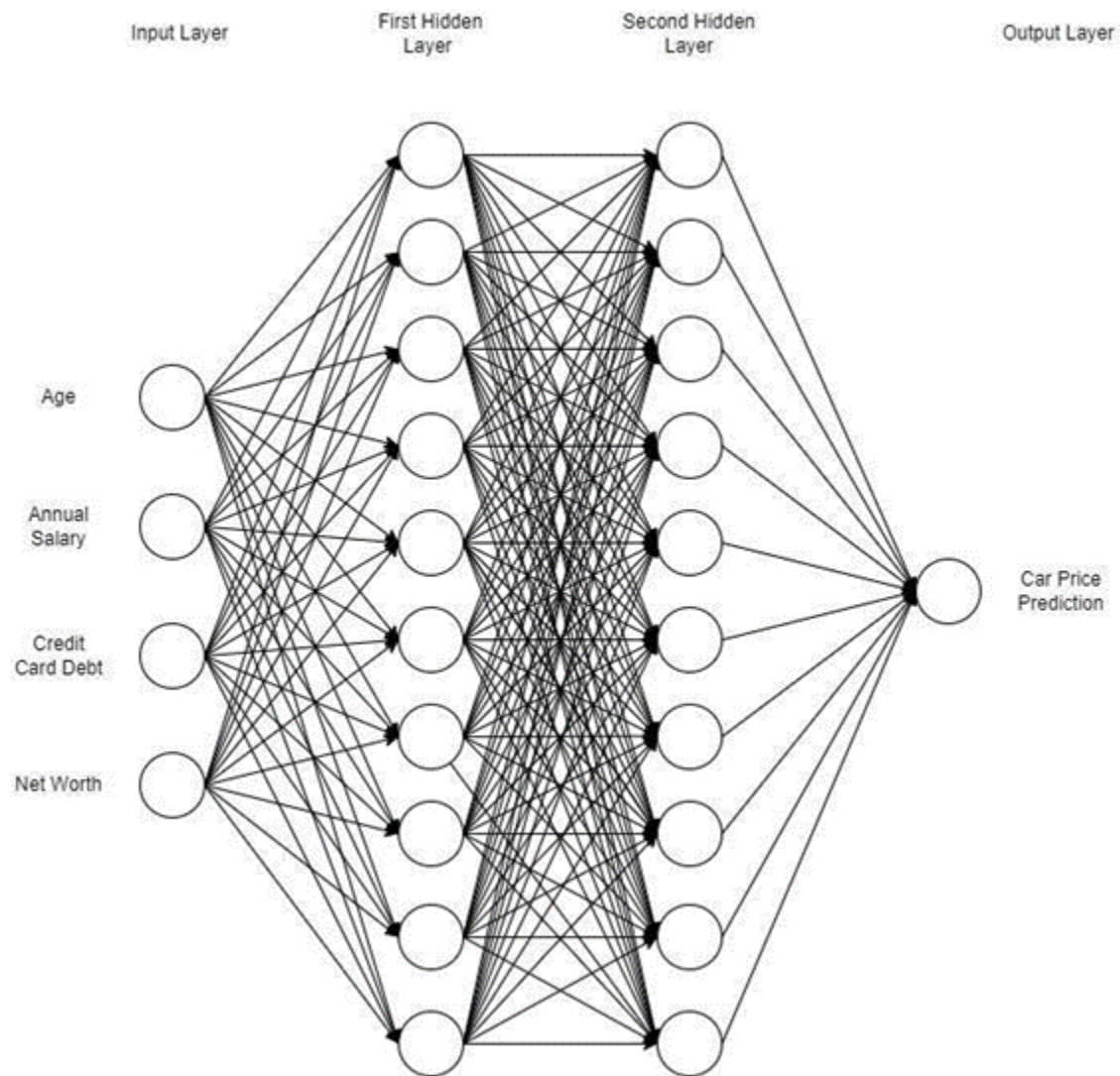
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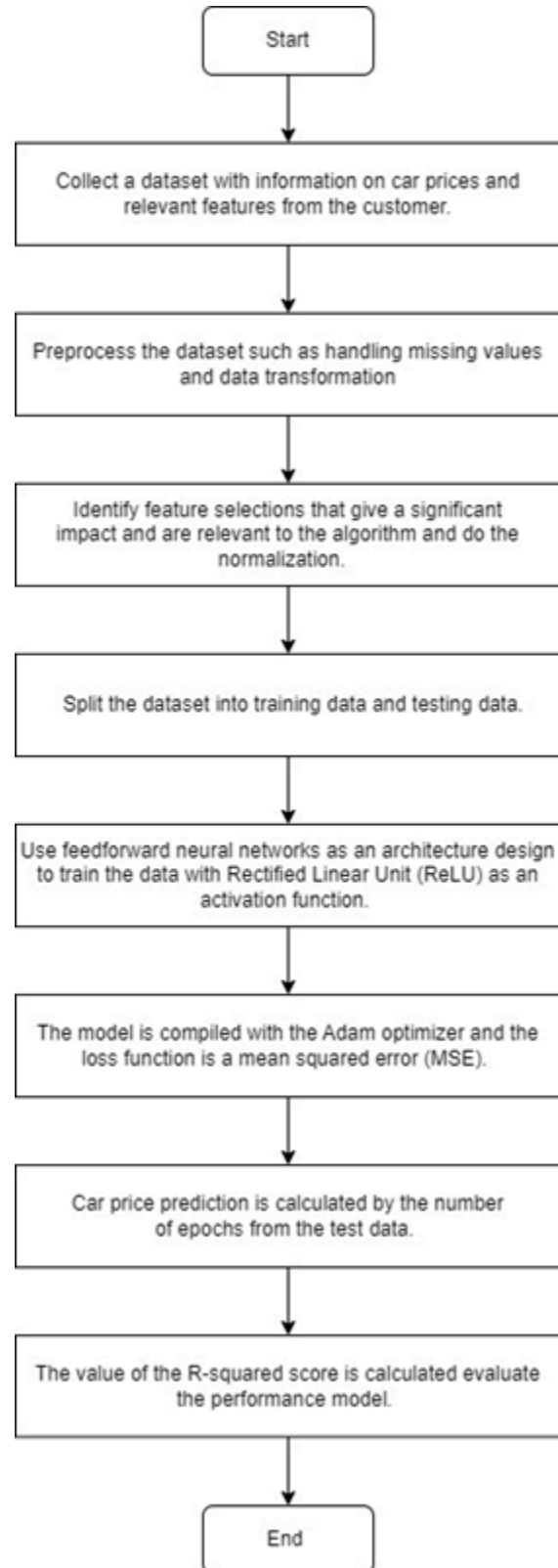
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Appendices

i) ANN Model



ii) Flowchart



iii) Business Case

Business Case

Project Name : Car Price Prediction Using ANN

Project Manager : Muhammad Zulhisyam Naqib Bin Mahurin

Client : -

Duration : 6 months

Executive Summary	This project is developed to predict customers' budget for purchasing a car based on several factors including economic background. This project will be beneficial for car salespeople, dealers and financial institutions.
Mission Statement	<p>The mission of this project is to:</p> <ul style="list-style-type: none">· Help financial institutions to estimate the amount of car loan to approve when a particular customer wants to purchase a car.· Ease the work of car salespeople and dealers to predict the car price that is suitable for the particular customer and choose the best car for their budget.· Explain customers why they not to choose a car that is not complying their economic state.
Product/Service	<p>The end product(system) will have the following modules:</p> <ul style="list-style-type: none">· Customer budget analyser· Loan approval check· Car price prediction

Project Definition	<p>The project is about to build a system using ANN for car price prediction. Using ANN model, we train models by giving ample amount of data so that the model learns the trend of the data and able to predict when the data of customers were inputted.</p> <p>The project will be beneficial for car salespeople, dealers and financial institutions so that they could do their job faster and can reduce errors in car sales.</p>
Project Organization	<p>This project consist of project manager who leads the project, data scientist, ML engineer and a software developer. Each of them will have a workflow based on project prepared by project manager.</p> <p>Meeting will be conducted two weeks once to get the updates from each person in this project in the form of report and showing progress.</p>

iv) Scope Statement

Project Scope Statement

Project name: Car Price Prediction using ANN.

Project Description	<p>This project is to be developed to predict customers' budget for purchasing a car based on their economic state. This project will be useful for car salespeople and dealers to predict customers' budget when they want to buy a car. This will also help them to sort out cars that are budget friendly for their respective customers. Financial institutions like banks can estimate the amount of car loan to approve when a particular customer wants to purchase a car.</p>
Project Objectives	<ul style="list-style-type: none">· To help financial institutions to estimate the amount of car loan to approve when a particular customer wants to purchase a car.· To ease the work of car salespeople and dealers to predict the car price that is suitable for the particular customer and choose the best car for their budget.· To give brief explanation to customers why they not to choose a car that is not complying their economic state.
Project Deliverables	<p>A car price prediction system with following modules:</p> <ul style="list-style-type: none">· Customer budget analyser· Loan approval check· Car price prediction
Project Boundaries	<p>Money: The budget allocated for this project is enough to satisfy all the conditions.</p> <p>Scope: The scope of this project is well-defined and clear.</p> <p>Time: The time needed to complete developing the system may be delayed as we have to manage the resources constraint.</p> <p>Resources: The resources that will be used to build this system are basic laptop with minimum requirements of storage, processing power and memory, this may cause delay in training the ANN model as it needs high powered computer/laptop.</p>

Project Requirements	<p>Technology requirements: This system to be developed should work on computer and laptop that is at least Windows 7 and the most latest technology based computer and laptop.</p> <p>Functional requirements: The system to be developed should process customer's data and provide insights such as car price budget prediction, loan approval checker and suggestions.</p> <p>Non-functional requirements: The system to be developed should be able to process as many as data of customers without crashing the system.</p> <p>Business requirements: The system to be developed should take customers data as input and predict the budget for car price near to accurate that is logical and affordable by the customer.</p> <p>Stakeholder requirements: The system to be developed should have an easy interface to use and provide needed details at each page.</p>
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v) Project Charter

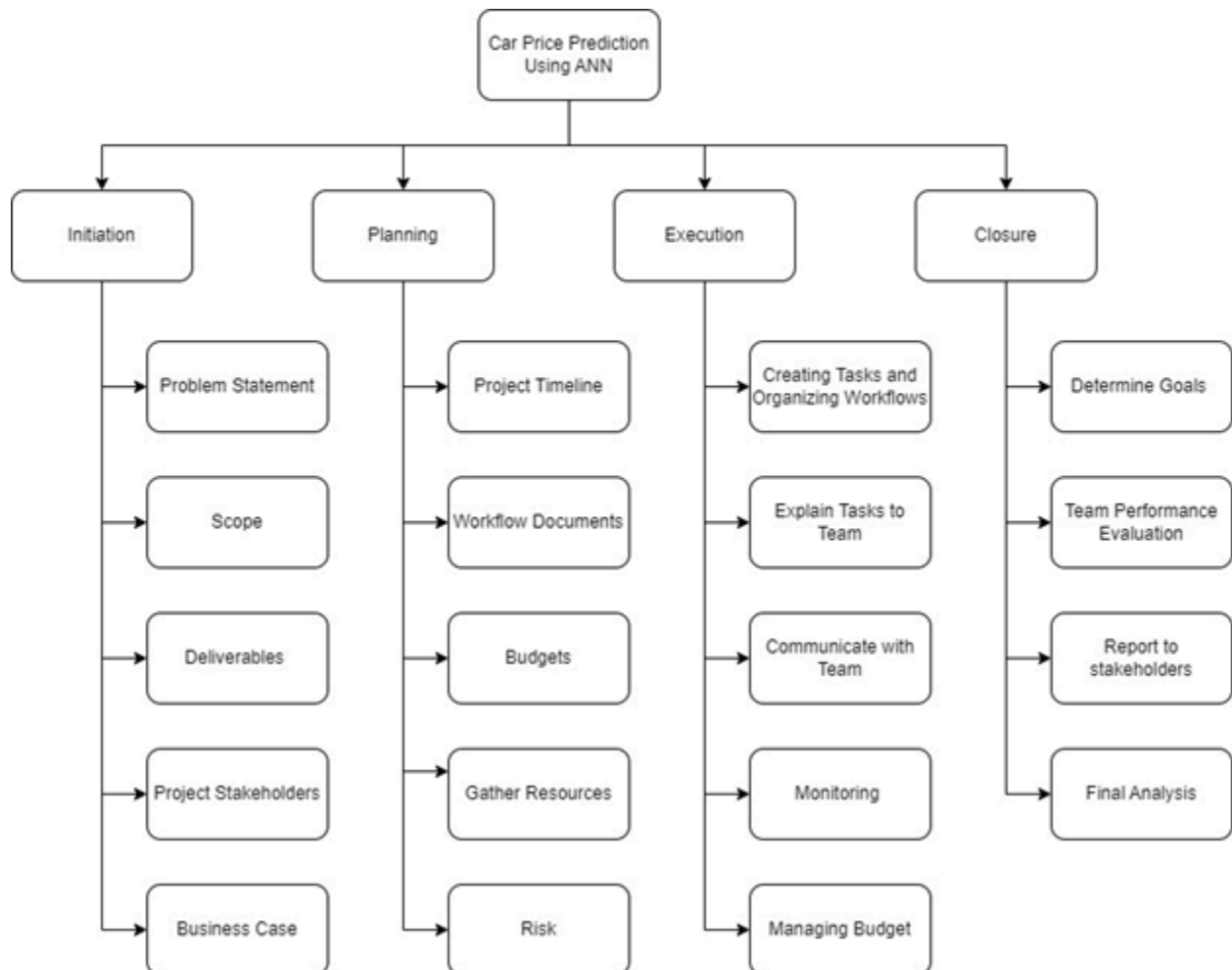
Project Name: Car Price Prediction using ANN	
Project description:	This project is about predicting customers' budget based on their background such as salary, debt, net worth and so on. This model will predict roughly the amount the customer could spend without breaking their budget.
Project objectives:	<ol style="list-style-type: none"> 1. To predict customers' budget for purchasing a car based on their background and their economic state. 2. To help salespeople and dealers to predict customers' budget when they want to buy a car. 3. To assist banks to estimate the amount of car loan to approve for specific customer wants to purchase a car.
Project participants:	<p>Muhammad Zulhisyam Naqib bin Mahurin (Project Manager)</p> <p>Akid Iskandar bin Shamsuddin (QA engineer)</p> <p>Mohamad Syafiq Syazwan bin Mohamad Salim (Developer)</p> <p>Aravind A/L Supramaniam (Developer)</p>
Available resources:	<p>Laptop(Intel i5, 10th gen, 16 gb ram, Intel iris graphics)</p> <p>Pycharm, Jupyter notebook</p>

Milestones:	<ol style="list-style-type: none"> 1. Data collection 2. Data Preprocessing 3. Feature engineering(Feature Engineering) 4. Train/Test split 5. Neural Network ANN implementation 6. ANN architecture optimization 7. Model testing 8. Model validation 9. Model deployment
Potential risks:	<ol style="list-style-type: none"> 1. The model might be trained with a lot of training data which will result in overfitting. 2. The team might have lack of time due to the limited resources available as ANN is quite heavy for basic laptop.
Approval:	<p>Project Manager : Muhammad Zulhisyam Naqib bin Mahurin</p> <p>Signature :</p> <p>Date : 22/11/2023</p>

vi) Project Schedule

ID	Task Name	October			November			December			January	
		9/10	16/10	23/10	31/11	5/12	8/12	13/12	22/12	5/1	16/1	19/1
1.	Project planning											
2	Data collection and preprocessing											
3	Model development											
4	Testing model performance											
5	Validation											
6	Deployment the complete model											
7	Documentation of model architecture											
8	Training and support											
9	Maintenance											
10	Stakeholder communication											
11	Evaluation and Optimization											

vii) Work Breakdown Structure



viii) Cost Estimate

WBS Item	Unit/Hrs.	Cost/Unit/Hrs.	Subtotals (RM)	WBS Level 1 Totals (RM)	Percentage of Total (%)
1. Project Management				283200	37.7
Project manager	900	100	90000		
Data scientist	900	75	75000		
ML engineer	900	66	60000		
Software Developer	900	50	45000		
Contraction (10% of software development and testing)			13200		
2. Hardware				66000	8.8
Cloud service	100	500	50000		
Serves	4	4000	16000		
3. Software				54000	7.2
Licensed software			Free		
Software development *			54000		
4. Testing (10% of total hardware and software costs)			12000	12000	1.6
5. Training and Support				220000	29.3
Trainee cost	100	320	32000		
Travel cost	10	800	8000		
Data scientist	900	75	75000		
ML engineer	900	66	60000		
Software Developer	900	50	45000		
6. Reserves (20% of total estimate)			111600	116000	15.4
Total project cost estimate				751200	

ix) Monitoring and Controlling Processes

Monitoring and controlling processes.

1) Performance Reports:

Project Detail Review

Performance report	
Project Name: Car Price Prediction	Date: 30/6/2023
Prepared By: Syafiq	Project Type (S, M, L): S
Project Manager: Zulhisyam	Project Sponsor: -

Number ID	Date Opened	Action Description	Assigned To	Date Close
1	4/4/2023	Standard of Work	Aravind	14/4/2023
2	20/4/2023	Analyze Risk	Syafiq	30/4/2023
3	30/4/2023	Process Improvement	Zulhisyam	15/5/2023
4	6/5/2020	Quality Assurance	Akid	16/5/2023
5	15/5/2023	Performance Checking	Aravind	20/5/2023
6	25/5/2023	Analyze Financial Performance	Syafiq	10/6/2023
7	6/6/2023	Management of Personnel	Akid	18/6/2023
8	20/6/2023	Timeline and Milestones	Zulhisyam	30/6/2023

2) Requested Changes:

CHANGE REQUEST FORM

Change Description		
Project Name: Car Price Prediction	Change Name: -	Number: 000324
Requested By: Syafiq – Development Team	Contact: 01114812634	Date: 30/6/2023
Description of Change: The purpose of this change request is to enhance the accuracy and effectiveness of the car price prediction model by incorporating additional features into the existing set.		
Reason for Change: 1)Vehicle Condition: Include a categorical variable indicating the condition of the vehicle (e.g., new, used, refurbished). 2)Mileage: Integrate the mileage of the vehicle as a continuous variable to provide more granular information. 3)Historical Pricing Data: Access historical pricing data for similar vehicles in the market to establish trends and patterns.		
Priority [Circle One]: 1. High 2. Medium 3. Low		

Impact on Deliverables:

for the Car price model, the impact will be positive, it is because the additional features, such as vehicle condition, mileage, and historical pricing data, are expected to enhance the accuracy and effectiveness of the car price prediction model. The model itself is a key deliverable of the project. Then, Risk Management will impact positive also. The change addresses potential limitations in the existing model, reducing the risk of inaccurate predictions and enhancing the model's adaptability to market changes.

Impact of Not Responding to Change (and Reason Why):**Date Needed: 5/6/2023****Approval of Request: Approved****Date: 1/6/2023****Change Impact****Tasks/Scope Affected: Task Dependencies, Timeline and Milestones, Project Objective, and Budget****Cost Evaluation: Labor costs, Training and Development, Overhead Costs****Risk Evaluation: Unforeseen Dependencies, Increased Complexity, Schedule Delays, Budget Overruns****Quality Evaluation: Performance, Compatibility, Quality Standards****Additional Resources: Skilled Personnel, Project Management Expertise, Training and Development, Budget Reallocation****Duration: Thorough Impact Analysis, Detailed Planning, Monitoring and Adjustments****Additional Effort: Adequate Resources, Resource Constraints****Impact on Deadline: Impact Analysis, Risk Mitigation, Timeline Adjustments****Alternative and Recommendations: Phased Implementation, Parallel Workstreams, Technology Upgrades**

Comments:

Sign Offs

[Circle One]: 1. Accepted 2. Deferred 3. Rejected 4. More Info Requested

Comments:

Project Manager Signature: Zulhisyam

Date: 1/6/2023

Decision Maker Signature: Aravind

Date: 1/6/2023

3) Updates on Plan:

ID	Task Name	Duration	Start	Finish	Predecessors
1	Project planning	7 days	9/10/2023	15/10/2023	
2	Data collection and preprocessing	7 days	16/10/2023	22/10/2023	1
3	Model development	38 days	23/10/2023	30/11/2023	2
4	Testing model performance	7 days	30/11/2023	5/12/2023	3
5	Validation	3 days	5/12/2023	7/12/2023	4
6	Deployment the complete model	20 days	24/11/2023	13/12/2023	3,4,5
7	Documentation of model architecture	10 days	13/12/2023	22/12/2023	6
8	Training and support	15 days	22/12/2023	5/1/2024	7
9	Maintenance	11 days	5/1/2023	16/1/2024	8
10	Stakeholder communication	4 days	16/1/2024	19/1/2024	9
11	Evaluation and Optimization	5 days	19/1/2024	24/1/2024	9

x) Lessons Learned

Project Title : Car Price Prediction using ANN

Project manager : Muhammad Zulhisyam Naqib bin Mahurin

Team members : Aravind A/L Supramaniam

Akid Iskandar bin Shamsuddin

Mohamad Syafiq Syazwan bin Mohamad Salim

Goals

Project goals	Goal Achieved? (Y/N)
Design simple user interface	Y
Deploy ANN model with high accuracy	Y
Train model with high volume dataset	N
Have good error handling and message prompting	N

New goals that is added
Lower processing time
Added precision in results

Lessons Learned

What went well?	How to improve next time	Assigned to
Simple user interface	Consider the HCI concept in making interfaces.	Mohamad Syafiq Syazwan bin Mohamad Salim
Prediction model with high accuracy	No improvement needed	Aravind A/L Supramaniam
ANN model worked well	Use latest NN model for better model development	Akid Iskandar bin Shamsuddin

What didn't went well?	How to improve next time	Assigned to
Time taken for model training is longer than expected	Use more powerful computers to train the model	Aravind A/L Supramaniam
Dataset preprocessing time is longer than expected	Use dataset with less anomalies	Mohamad Syafiq Syazwan bin Mohamad Salim

Comments: -

xi) Closure

- Determine Goal Achievements

Project managers and stakeholders will assess whether the project has satisfied the predefined goals and objectives. This evaluation helps ensure the project's expected outcomes have been achieved.

In this project, goals and objectives are:

1. To predict customer car purchasing budget based on their background and their economic state.
2. To help salespeople to suggest the best car that fits the customer budget.
3. Financial institutions like banks could estimate the amount of loan to be approved for a customer's car purchase.

These goals will be assessed whether they are achieved or not in this phase.

- Team Performance Evaluation

This involves analyzing individual contribution, teamwork and work quality.

In this phase, every teammate will have a specific task assigned to them. For instance, data collection, data preprocessing, model building, and accuracy testing are assigned to each of us in a team.(4 in a team). Contribution, teamwork and the work quality is analyzed in this phase.

- Report to stakeholders

We will produce a Project Closure Report to stakeholders that contains project actual outcomes, issues in projects, achievements and any changes from proposed plan.

- Final Analysis

Final analysis of project performance will be conducted which will include project's budget, schedule, scope, risk assessment and also issues that were encountered and how they were resolved. These are the important details for the projects which we can consider as the summary of the project.

xii) Project Archives

Checklist of project documents

- ☒ Business Case
- ☒ Project Charter
- ☒ Work Breakdown Structure
- ☒ Scope Statement
- ☒ Project Schedule
- ☒ Cost estimate
 - ☒ Net Present Value
 - ☒ Return on Investment
 - ☒ Payback analysis
 - ☒ Internal Rate of Return
 - ☒ Weighted Scoring Model
 - ☒ Balanced Scorecard
 - ☒ Project Charter
- ☒ Coding
- ☒ Flowchart
- ☒ Dataset
- ☒ Model development
- ☒ Training and Testing
- ☒ Performance Report
- ☒ Requested Changes
- ☒ Updates on plan
- ☒ Final Report
- ☒ Lesson Learned

