**TEAMWORK EVIDENCE FOR GROUP 3**

To complete all the objectives of this assignment, our group have been collaborated well in a diverse, challenging collaborative environment abd commit faithful implementation of strategies from the project plan.

There are several pieces of evidence that can demonstrate our effective group work

1. **Achieving project goals:** This is primary target we commit to achieve achieve within the specified timeline because it is strongest indicator of our ability to work collaboratively. We agreed the group target, the define the project plan then try to achieve all of objectives.
   1. **Group Target Grade**
      1. **Group Background**

The team consists of two second-semester students, one third-semester and 1 first-semester Master student majoring in Data Science/Data Science and Information System. We combine domain knowledge from different industries such as Event management, human resources, IT, sales to conduct an useful report on data breaches based on provided data.

* + 1. **Group’s Target Criteria**

With this assignment, we aim to achieve 80 and above.

This report will cover all the aspects of CRISP-DM to explores some important trends of past data breaches and predict various aspects of future data breaches.

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|  | **Criteria** | | **Description of Work** |
|  | Business Understanding | | * Determine the objectives |
|  | Data understanding | | * Check the distributed data file * Explore the data * Verify data qualify, check if the data is clean, missing, duplicated. * Data profiling |
|  | Well data preparation | | * Select data * Select features * Clean data * Format data * Feature engineering * One-hot coding |
|  | Modelling implementation | Exploration and identification of important trends of past data breaches | * Run 3 different models. * Check the accuracy between models. |
| Predict various aspects of future data breaches | * Separate the data into 2 sets to test the model and predict some features in the future. |
|  | Evaluation | | Evaluate how accurate the model  Review the process  Determine next steps |
|  | Report + Presentations | | Finalize the report  Conduct the video and submit |

* + 1. **Group Plan**

**Objectives:**

Answer the insights questions

**Deliverables:**

* Methodology for the project
* Codes for cleaning data, preparing data
* Codes for PCA, feature engineering, features reductions
* Applied models
* Report
* Slides
* Video
* Github

1. **Clear roles and responsibilities:** Effective group work involves a clear understanding of each member's roles and responsibilities. If each team member knows what is expected of them and is accountable for their actions, it can lead to a more productive and efficient group. We use Gantt chart and RACI chart and milestones tables to clarify roles and responsibilities.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **RACI Matrix** | | **Roles and Responsibilities** | | | |  |
| **PRT564 - Data Visualization** | | **R**esponsible, **A**ccountable, **C**onsulted, **I**nformed | | | | |
|  |  |  |  |  |  |  |
| **R** | **Responsible** | **C** | **Consulted** | |  |  |
| **A** | **Accountable** | **I** | **Informed** | |  |  |
|  |  |  |  |  |  |  |
|  |  | **ROLES** | **Tracy** | **Nick** | **Anna** | **Sanjana** |
| **ID** | **Deliverable or Task** | **Status** | **Project Team** | | | |
|  | **Phase 1: Business + Data Understanding** |  |  |  |  |  |
| 1.1 | Business understanding |  | **C** | **I** | **R** | **A** |
| 1.2 | Data understanding |  | **I** | **I** | **R** | **A** |
| 1.3 | Clarify the objectives |  | **C** | **A** | **R** | **C** |
|  | **Phase 2: Data preparation** |  |  |  |  |  |
| 2.1 | Select data |  | **I** | **A** | **R** | **I** |
| 2.2 | Clean data, format data |  | **I** | **A** | **R** | **I** |
| 2.3 | Classify data |  | **R** | **A** | **R** | **I** |
|  | **Phase 3: Modeling** |  |  |  |  |  |
| 3.1 | Select the relevant model |  | **C** | **R** | **I** | **C** |
| 3.2 | Test the model |  | **I** | **R** | **C** | **C** |
| 3.3 | Build model |  | **I** | **R** | **C** | **C** |
|  | **Phase 4: Evaluation and conclusion** |  |  |  |  |  |
| 4.1 | Evaluate results, review process |  | **A** | **I** | **C** | **R** |
| 4.2 | Determine next steps and conclude |  | **I** | **R** | **I** | **C** |
|  | **Phase 5: Teamwork** |  |  |  |  |  |
| 5.1 | Finaline the report about teamwork |  | **R** | **I** | **C** | **I** |
|  | **Phase 6: Report and video** |  |  |  |  |  |
| 6.1 | Finalize the report |  | **A** | **I** | **I** | **R** |
| 6.2 | Finalize Github |  | **R** | **A** | **I** | **I** |
| 6.3 | Combine video and submit |  | **I** | **I** | **A** | **R** |

* 1. **Milestones**

|  |  |  |
| --- | --- | --- |
|  | **Tasks** | **Date** |
| 1 | Business + Data understanding | 1/04/2023 |
| 2 | Data preparation | 06/04/2023 |
| 3 | Modelling | 13/04/2023 |
| 4 | Evaluation and conclusion | 20/04/2023 |
| 5 | Teamwork report | 20/04/2023 |
| 6 | Report and presentation video | 27/04/2023 |

**1.2 Gantt Charts**

A Gantt Chart is used to ensure the workflow can meet the due date. The left represents a list of activities, and along the top is the estimated time scale. Each action is displayed by a bar, the position and length of each bar correspond to the activity's start date, duration, and finish date.

1. **Efficient communication**: We all agree to deploy efficient communication in group work. All team members can communicate effectively and share ideas, feedback, and concerns openly and freely.
   1. **Communications**

- We are trying to hold a meeting weekly based on everyone’s availability at Casurina libraby.

- MS Teams platform will be considered as primary communication channel. All the files and update work will be uploaded in MS Teams so everyone can track it easily.

- Everyone pays respect to each other.

**3 .2 Commitments**

* Everyone commits to dealine and meeting

1. **Positive feedback:**

After the project, we gave the feedback (via form) to each other for individual reflection about all aspects of teamwork) Everyone is satisfied with the collaboration and communication within the group which means our group have been working together effectively.

1. **Diversity and inclusion**: We are groups of 4 students from different starting point and domain background. Some are first year students while some are second year students with various background of Marketing, human resources, Communications. We are also from different countries such as Vietnam, India, Australia. Those aspects make our group diverse which tend to bring different perspectives and ideas to the table, leading to better problem-solving and decision-making. Moreover, based on individuals’ strengths and skills we assigned the tasks very relevantly.

Overall, effective group work is demonstrated through the ability to achieve project goals, positive feedback, diversity and inclusion, clear roles and responsibilities, and efficient communication.