**AI PROJECT LOGBOOK**

Resource for Students

*(Adapted from “IBM EdTech Youth Challenge – Project Logbook” developed by IBM in collaboration with Macquarie University, Australia and Australian Museum)*

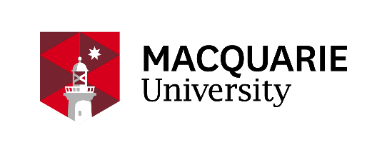
**KEY PARTNERS**



# **INDIA IMPLEMENTATION PARTNERS**



# **GLOBAL PARTNERS**

# **AI Project Logbook**

**PROJECT NAME:** Travel suggestions and bookings for users using ChatBot (Trekker)

**SCHOOL NAME:** Bal Bharati Public School, Noida

**YEAR/CLASS:** 2023-2024 XII-B

**TEACHER NAME:** Asha Menon

### **TEACHER EMAIL:** asha.menon@nd.balbharati.org

**TEAM MEMBER NAMES AND GRADES:**

1. Saumya Datt

1. Divyansh Mishra

# Introduction

This document is your **Project Logbook**, and it will be where you record your ideas, thoughts and answers as you work to solve a local problem using AI.

Make a copy of the document in your shared drive and work through it digitally with your team. You can also print a copy of the document and submit a scanned copy once you have completed the Project Logbook. Feel free to add pages and any other supporting material to this document.

Refer to the **AI****Project Guide** for more details about what to do at each step of your project.

# Team Roles

**2.1 Who is in your team and what are their roles?**

|  |  |  |
| --- | --- | --- |
| Role | Role description | Team Member Name |
| 1. Project Leader 2. Prototype builder 3. Research Analyst | 1. Creating the chatbot using Google Dialogflow ES 2. Testing and picking between the right entities for the Travel-based chatbot 3. Researching data for chatbot | Saumya Datt |
| 1. Video producer 2. Research Analyst | 1. Creating the website for the chatbot using 2. Creating video for the chatbot using 3. Researching data for chatbot | Divyansh Mishra |

**2.2 Project plan**

The following table is a guide for your project plan. You may use this or create your own version using a spreadsheet which you can paste into this section. You can expand the ‘Notes’ section to add reminders, things that you need to follow up on, problems that need to be fixed urgently, etc.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Phase** | **Task** | **Planned**  **start date** | **Planned end date** | **Planned duration (hours, minutes)** | **Actual start date** | **Actual end date** | **Actual duration (hours, minutes)** | **Who is responsible** | **Notes/Remarks** |
| Preparing for the project | Coursework, readings | 28th June, 2023 | 28th June, 2023 | 2.0 hrs | 28th June, 2023 | 28th June, 2023 | 2.0 hrs | Saumya Datt |  |
|  | Set up a team folder on a shared drive | 1st July, 2023 | 1st July, 2023 | 20 mins | 1st July, 2023 | 1st July, 2023 | 20 mins | Divyansh Mishra |  |
| Defining the problem | Background reading | 6th July, 2023 | 6th July, 2023 | 3.0 hrs | 6th July, 2023 | 6th July, 2023 | 3.0 hrs | Saumya Datt  Divyansh Mishra |  |
| Research issues in our community | 9th July, 2023 | 9th July, 2023 | 3.0 hrs | 9th July, 2023 | 9th July, 2023 | 3.0 hrs | Saumya Datt |  |
| Team  meeting to discuss issues and select an issue for the project | 14th July, 2023 | 14th July, 2023 | 2.5 hrs | 14th July, 2023 | 14th July, 2023 | 2.5 hrs | Saumya Datt  Divyansh Mishra |  |
| Complete  section 3 of the Project  Logbook | 19th July, 2023 | 19th July, 2023 | 1.5 hrs | 19th July, 2023 | 19th July, 2023 | 1.5 hrs | Saumya Datt  Divyansh Mishra |  |
| Rate yourselves | 20th July, 2023 | 20th July, 2023 | 1 hrs | 20th July, 2023 | 20th July, 2023 | 1 hrs | Saumya Datt  Divyansh Mishra |  |
| Understanding the users | Identify users | 29th July, 2023 | 29th July, 2023 | 2 hrs | 29th July, 2023 | 29th July, 2023 | 2 hrs | Saumya Datt |  |
| Meeting with users to observe them | 7th August, 2023 | 7th August, 2023 | 5 hrs | 7th August, 2023 | 7th August, 2023 | 5 hrs | Divyansh Mishra |  |
| Interview with user (1) | 9th August, 2023 | 9th August, 2023 | 1 hrs | 9th August, 2023 | 9th August, 2023 | 1 hrs | Divyansh Mishra |  |
| Interview with user (2), etc… | 9th August, 2023 | 9th August, 2023 | 1 hrs | 9th August, 2023 | 9th August, 2023 | 1 hrs | Saumya Datt |  |
| Complete  section 4 of the Project  Logbook | 13th August, 2023 | 13th August, 2023 | 2.5 hrs | 13th August, 2023 | 13th August, 2023 | 2.5 hrs | Saumya Datt  Divyansh Mishra |  |
| Rate yourselves | 14th August, 2023 | 14th August, 2023 | 1 hrs | 14th August, 2023 | 14th August, 2023 | 1 hrs | Saumya Datt  Divyansh Mishra |  |
| Brainstorming | Team  meeting to generate ideas for a solution | 16th August, 2023 | 16th August, 2023 | **2 hrs** | 16th August, 2023 | 16th August, 2023 | **2 hrs** | Saumya Datt  Divyansh Mishra |  |
| Complete  section 5 of the Project  Logbook | 18th August, 2023 | 18th August, 2023 | 1 hrs | 18th August, 2023 | 18th August, 2023 | 1 hrs | Saumya Datt  Divyansh Mishra |  |
| Rate yourselves | 19th August, 2023 | 19th August, 2023 | 1 hrs | 19th August, 2023 | 19th August, 2023 | 1 hrs | Saumya Datt  Divyansh Mishra |  |
| Designing your solution | Team  meeting to design the solution | 25th August, 2023 | 25th August, 2023 | 1 hrs | 25th August, 2023 | 25th August, 2023 | 1 hrs | Saumya Datt  Divyansh Mishra |  |
| Complete  section 6 of the logbook | 25th August, 2023 | 25th August, 2023 | **2 hrs** | 25th August, 2023 | 25th August, 2023 | **2 hrs** | Saumya Datt  Divyansh Mishra |  |
| Rate yourselves | 26th August, 2023 | 26th August, 2023 | 1 hrs | 26th August, 2023 | 26th August, 2023 | 1 hrs | Saumya Datt  Divyansh Mishra |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Collecting and preparing data | Team  meeting to discuss data requirements | 27th August, 2023 | 27th August, 2023 | **2 hrs** | 27th August, 2023 | 27th August, 2023 | **2 hrs** | Saumya Datt  Divyansh Mishra |  |
| Collecting and preparing data Prototyping | Data collection | 27th August, 2023 | 27th August, 2023 | **2 hrs** | 27th August, 2023 | 27th August, 2023 | **2 hrs** | Saumya Datt |  |
| Data preparation and labelling | **30th** August, 2023 | **30th** August, 2023 | **2 hrs** | **30th** August, 2023 | **30th** August, 2023 | **2 hrs** | Divyansh Mishra |  |
| Complete  Section 6 of the Project  Logbook | **30th** August, 2023 | **30th** August, 2023 | **2.5 hrs** | **30th** August, 2023 | **30th** August, 2023 | **2.5 hrs** | Saumya Datt  Divyansh Mishra |  |
| Team  meeting to plan prototyping phase | 2nd Sept, 2023 | 2nd Sept, 2023 | 2 hrs | 2nd Sept, 2023 | 2nd Sept, 2023 | 2 hrs | Saumya Datt  Divyansh Mishra |  |
| **Prototyping Testing** | Train your model with input dataset | 4th Sept, 2023 | 4th Sept, 2023 | 2 hrs | 4th Sept, 2023 | 4th Sept, 2023 | 2 hrs | Saumya Datt |  |
| Test your model and keep training with more data until you think your model is accurate | 4th Sept, 2023 | 4th Sept, 2023 | 3 hrs | 4th Sept, 2023 | 4th Sept, 2023 | 3 hrs | Saumya Datt  Divyansh Mishra |  |
| Write a program to  initiate actions based on the result of your model | 9th Sept, 2023 | 9th Sept, 2023 | 3 hrs | 9th Sept, 2023 | 9th Sept, 2023 | 3 hrs | Saumya Datt |  |
| Complete  section 8 of the Project  Logbook | 10th Sept, 2023 | 10th Sept, 2023 | 2 hrs | 10th Sept, 2023 | 10th Sept, 2023 | 2 hrs | Saumya Datt  Divyansh Mishra |  |
| Rate yourselves | 10th Sept, 2023 | 10th Sept, 2023 | 1 hrs | 10th Sept, 2023 | 10th Sept, 2023 | 1 hrs | Saumya Datt  Divyansh Mishra |  |
| Team  meeting to discuss testing plan | 11th Sept, 2023 | 11th Sept, 2023 | 2 hrs | 11th Sept, 2023 | 11th Sept, 2023 | 2 hrs | Saumya Datt  Divyansh Mishra |  |
| **Testing Creating the video** | Invite users to test your prototype | 17th Sept, 2023 | 17th Sept, 2023 | 2 hrs | 17th Sept, 2023 | 17th Sept, 2023 | 2 hrs | Saumya Datt |  |
| Conduct  testing with users | 17th Sept, 2023 | 17th Sept, 2023 | 2 hrs | 17th Sept, 2023 | 17th Sept, 2023 | 2 hrs | Saumya Datt |  |
| Complete  section 9 of  the Project  Logbook | 19th Sept, 2023 | 19th Sept, 2023 | 2 hrs | 19th Sept, 2023 | 19th Sept, 2023 | 2 hrs | Saumya Datt  Divyansh Mishra |  |
| Rate yourselves | 19th Sept, 2023 | 19th Sept, 2023 | 1 hrs | 19th Sept, 2023 | 19th Sept, 2023 | 1 hrs | Saumya Datt  Divyansh Mishra |  |
| Team  meeting to discuss video creation | 21st Sept, 2023 | 21st Sept, 2023 | 2 hrs | 21st Sept, 2023 | 21st Sept, 2023 | 2 hrs | Saumya Datt  Divyansh Mishra |  |
|  | Write your script | 22nd Sept, 2023 | 22nd Sept, 2023 | 1 hrs | 22nd Sept, 2023 | 22nd Sept, 2023 | 1 hrs | Saumya Datt |  |
|  | Film your video | 26th Sept, 2023 | 26th Sept, 2023 | 2 hrs | 26th Sept, 2023 | 26th Sept, 2023 | 2 hrs | Divyansh Mishra |  |
|  | Edit your video | 27th Sept, 2023 | 27th Sept, 2023 | 2 hrs | 27th Sept, 2023 | 27th Sept, 2023 | 2 hrs | Divyansh Mishra |  |
| **Completing the logbook** | Reflect on the project  with your team | 5th Oct, 2023 | 5th Oct, 2023 | 2 hrs | 5th Oct, 2023 | 5th Oct, 2023 | 2 hrs | Saumya Datt  Divyansh Mishra |  |
|  | Complete sections 10 and 11 of the  Project  Logbook | 5th Oct, 2023 | 5th Oct, 2023 | 2 hrs | 5th Oct, 2023 | 5th Oct, 2023 | 2 hrs | Saumya Datt  Divyansh Mishra |  |
|  | Review your Project logbook and video | 7th Oct, 2023 | 7th Oct, 2023 | 2 hrs | 7th Oct, 2023 | 7th Oct, 2023 | 2 hrs | Divyansh Mishra |  |
| **Submission** | Submit your entries on the IBM |  |  |  |  |  |  |  |  |

**2.3 Communications plan**

Will you meet face-to-face, online or a mixture of each to communicate?

The team members met on a regular basis through Google meet and most discussions were carried out within the school campus.

How often will you come together to share your progress?

In order to share our progress with each other, a meeting was held during the weekends.

Who will set up online documents and ensure that everyone is contributing?

The online documents were set up by the Group leader and the video/website editor, the group leader made sure that both contributed equally.

What tools will you use for communication?

● Whatsapp

● Gmail

● GMeet

● G Suite

**2.4 Team meeting minutes (create one for each meeting held)**

|  |
| --- |
| Date of meeting:  28th June, 2023  Who attended: Saumya Datt, Divyansh Sharma  Purpose of meeting:  Action plan for project  Items discussed:  1. Course work readings  2. Setup up a team folder on Google drive  3. Project timeline scheduled  Things to do (what, by whom, by when)  1.Setup up a team folder on Google drive  2. Project logbook update  Date of meeting:  29th June, 2023  Who attended:  Saumya Datt  Divyansh Sharma  Purpose of meeting:  Defining the problem  Items discussed:  1. Background reading  2. Research issues in our community  3. Issues discussed  Things to do (what, by whom, by when) 1. Project logbook update  2. Local Issues listed  3. Issue to focus on  4. Identify Users  Date of meeting:  30th June,2023  Who attended:  Saumya Datt  Divyansh Sharma  Purpose of meeting:  User requirements  Items discussed:  1. Meeting with User  2. Points to be discuss with user  Things to do (what, by whom, by when) 1. Project logbook update  2. Discussion with user  3. Understanding the requirement  Date of meeting:  1st July, 2023  Who attended:  Saumya Datt  Divyansh Sharma  Purpose of meeting:  Brainstorming  Items discussed:  1. Ideas for solutions to be discussed  Things to do (what, by whom, by when) 1. Project logbook update  2. Generation of ideas and collect the relevant data |

# Problem Definition

**3.1 List important local issues faced by your school or community**

|  |
| --- |
| Being unable to decide or select a travel destination in India that suits everyone. |

**3.2 Which issues matter to you and why?**

|  |
| --- |
| 1. Identifying the ideal travel destination based on user’s selection of month of visit 2. Selecting a destination lacking the experience the user/family wished for due to confusion |

**3.3 Which issue will you focus on?**

|  |
| --- |
| Assisting the user in making the right travel selection through a couple of questions by a chatbot. |

**3.4 Write your team’s problem statement in the format below.**

How can we help a family find a way to select a travel destination that fulfils their ideal holiday planning.

# The Users

**4.1 Who are the users and how are they affected by the problem?**

|  |
| --- |
| The project was built, keeping in mind the needs of the families. This project focuses on understanding and analysing the personality of the users interacting with our chatbot. This helps them select a destination based on their requirements. |

**4.2 What have you actually observed about the users and how the problem affects them?**

|  |
| --- |
| 1. Collectively varied opinions and interests while choosing a travel destination leading to confusion |

**4.3 Record your interview questions here as well as responses from users.**

|  |
| --- |
| Q. How often do you plan outings or trips with your family?  A. Once a year usually or a short outing twice a year.  Q. Do you face issues while deciding a place to visit with your family?  A. Yes, we are unable to come to a conclusion sometimes, but we reason it out come to a decision by majority.  Q. Will a travel-based chatbot be helpful to you while making such decisions?  A. It will, since our travel is barely twice a year, we would like to have a site catering to our needs and requirements.  Q. What are your expectations from our chatbot?  A. The output or destination selected by the chatbot should suit our preferences and requirements.  Q. Anything you would like to add to our model in future?  A. It should eventually be able to pick a destination taking our budget and duration into consideration. |
|  |

**4.4 Empathy Map**

Map what the users say, think, do and feel about the problem in this table

|  |  |
| --- | --- |
| **What our users are saying**            Too many options    Several varied opinions | **What our users thinking**          A solid model that helps make these decisions  Reduces differences in opinion and helps reach a collective solution |
| **What our users are doing**          Attempting to pick a destination to visit through their own research | **How our users feel**          A model helpful for this entire process to be easier and reliable |

**4.5 What are the usual steps that users currently take related to the problem and where are the difficulties?**

1. Browses several sites for ideas and places to visit

2. Narrows the options down to a few spots

3. Moves on further with the discussion over where to go with family members and friends

4. Occasionally unable to decide with several varied opinions and suggestions

**4.6 Write your team’s problem statement in the format below.**

Families are experiencing issues with picking a travel destination today

because of not enough depth on the locations or due to too many opinions.

# Brainstorming

**5.1 Ideas**

How might you use the power of AI/machine learning to solve the users’ problem by increasing their knowledge or improving their skills?

|  |  |
| --- | --- |
| AI Idea #1 | Chatbots use AI and ML to remember user conversations and agent training takes places constantly |
| AI Idea #2 | AI can help detect user’s likes and dislikes |
| AI Idea #3 | It can help in removing bias while training the models |
| AI Idea #4 | Leads to higher efficiency |

**5.2 Priority Grid**

Evaluate your five AI ideas based on value to users and ease of creation and implementation.

|  |  |
| --- | --- |
| **High value to users, easy to create**        High value to users, easy to create a chatbot that would help people with their questions | High value to users, hard to create  High value to users, hard to create a chatbot that would do both prediction and suggestions based on past chats. |
| Low value to users, easy to create        Low value to users, easy to create a chatbot that can identify the most frequently requested question. | Low value to users, hard to create  Low value to users, hard to create a chatbot that can identify the most requested question and suggest a solution and changes. |

Easy Hard

**5.3 Based on the priority grid, which AI solution is the best fit for your users and for your team to create and implement?**

Briefly summarize the idea for your solution in a few sentences and be sure to identify the tool that you will use.

|  |
| --- |
| Through Google Dialogflow, AI can predict and help users decide a travel destination. Based on these results and options provided by the chatbot on the destinations available based on their selection of the travel month, users can come to a decision. On selecting the travel destination, the chatbot further helps in making travel bookings to the selected destination instantly after a few simple questions. |

|  |  |  |
| --- | --- | --- |
| **Rate yourself**    **Brainstorming**    1 point – 2 points -  3 points - | 9 | A brainstorming session was conducted. A solution was selected.  A brainstorming session was conducted using creative and critical thinking. A solution was this section  A brainstorming session was conducted using creative and critical thinking. A compelling solution was selected with supporting arguments in this section. |
|  |

# Design

**6.1 What are the steps that users will now do using your AI solution to address the problem?**

1. The chatbot first asks the user if they have a destination in India selected beforehand

2. The user mentions the states, if one, and the chatbot provides the top 5 destinations to visit

3. In case the user is not aware of the destination, the chatbot asks the month they plan on travelling

4. Based on the selection of month, the chatbot provides a list of the most ideal states to visit during that specific month

5. The user then selects one out of the provided options

6. The chatbot then shares the top destinations to explore for the selected state

7. The user asks the chatbot to book flights to the destination

8. After a few questions based on travel distance, time and date, the chatbot books the flight

# Data

**7.1 What data will you need to train your AI solution?**

|  |
| --- |
| Data is fed into the chatbot through research and the agent is trained after every edit. |

**7.2 Where or how will you source your data?**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Data needed** | **Where will the data come from?** | **Who owns the data?** | **Do you have permission to use the data?** | **Ethical considerations** |
| **Have** | **From site** | **Sites** | **yes** | **Open source** |
| **Want/Need** | **User** | **User** | **yes** | **Shared by user** |
| **Nice to have** | **Site/User** | **Sites** | **yes** | **Open source** |

|  |  |  |
| --- | --- | --- |
| **Rate yourself**    **Data**     1. point – sourced or collected. 2. points - 3. points - been considered. | 9 | Relevant data to train the AI model have been identified as well as how the data will be    Relevant data to train the AI model have been identified as well as how the data will be  sourced or collected. There is evidence that the dataset is balanced.  Relevant data to train the AI model have been identified as well as how the data will be e that the dataset is balanced, and that safety and privacy have |
| sourced or collected. There is evidenc |

# Prototype

**8.1 Which AI tool(s) will you use to build your prototype?**

|  |
| --- |
| Google Dialogflow CX |

**8.2 Which AI tool(s) will you use to build your solution?**

|  |
| --- |
| Google Dialogflow CX |

**8.3 What decisions or outputs will your tool generate and what further action needs to be taken after a decision is made?**

|  |
| --- |
| Creates a chatbot which caters to user’s responses and needs. |

|  |  |  |
| --- | --- | --- |
| **Rate yourself**    **Prototype**    1 point – 2 points - 3 points - requirements. | 10 | A concept for a prototype shows how the AI model will work. A prototype for the solution has been created and trained.  A prototype for the solution has been created and successfully trained to meet users’ |
|  |

# Testing

**9.1 Who are the users who tested the prototype?**

|  |
| --- |
| Friends, Colleagues, Teachers, Parents |

**9.2 List your observations of your users as they tested your solution.**

|  |
| --- |
| * Able to pick destinations based on their decisions and arriving at a solution * Approving highlighted destinations made by chatbot on the selected states |

**9.3 Complete the user feedback grid**

|  |  |
| --- | --- |
| What works            Able to select their ideal travel destination | What needs to change            Add in budget options and change the suggested places to visit incase the user doesn’t approve or like it. |
| Questions?                  Is it possible for the chatbot to provide an itinerary based on user’s no. of days picked for travel? | Ideas              Itinerary  Budget options Travel suggestions across more than just one state |

**9.4 Refining the prototype: Based on user testing, what needs to be acted on now so that the prototype can be used?**

|  |
| --- |
| Addition to a website with a domain |

**9.5 What improvements can be made later?**

|  |
| --- |
| Addition of more countries for ideal travel suggestions. (Spread outside India) |

# Team collaboration

**10.1 How did you actively work with others in your team and with stakeholders?**

|  |
| --- |
| We could actively work with other team members by collaborating online, collecting user requirements, conducted brainstorming sessions, defining problem statement, defining prototype, data acquisition, data exploration, getting user’s feedback, reviewing the state holder requirements, designing the model, training and test model, evaluating the model and refined prototype considering user requirements. |

# Individual learning reflection

**11.1. Team Reflections**

A good way to identify what you have learned is to ask yourself what surprised you during the project. List the things that surprised you and any other thoughts you might have on issues in your local community.

**Team member name: Saumya Datt**

|  |
| --- |
| As the team leader, I gained leadership qualities and I understood the importance of hardwork. My listening skills improved as I had to listen to the problems of my teammates and resolve them. Thanks to this project I’ve got a newfound interest towards gaining new skills, in this case, how to use google dialogflow. |

**Team member name:** Divyansh Mishra

|  |
| --- |
| Have gained an interest in AI and its applications as well as in editing videos after this project. Hoping to learn more about AI through more such projects. |

# Chatbot Link

**URL: https://bot.dialogflow.com/543f06b7-ddb2-4d7c-a890-7e8e40335054**

# Video Link

**Enter the URL of your team video: https://www.canva.com/design/DAF5q2wR2b4/NLNRwzC36FfBZ\_9VNvD9-Q/edit?ui=eyJHIjp7fX0**

**Appendix**

**Recommended Assessment Rubric (for Teachers)**

**LOGBOOK AND VIDEO CONTENT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Steps** | **3 points** | **2 points** | **1 point** | **Points Given** |
| Problem  definition | A local problem which has not been fully solved before is explained in detail with supporting research. | A local problem which has not been fully solved before is described. | A local problem is  described |  |
| The Users | Understanding of the user group is evidenced by completion of all of the steps in *Section 4 The Users* and thorough investigation. | Understanding of the user group is evidenced by completion of most of the steps in *Section 4 The Users*. | The user group is described but it is unclear how they are affected by the problem. |  |
| Brainstorming | A brainstorming session was conducted using creative and critical thinking. A compelling solution was selected with supporting arguments from *Section 5 Brainstorming.* | A brainstorming session was conducted using creative and critical thinking. A solution was selected with supporting arguments in *Section 5 Brainstorming.* | A brainstorming session was conducted. A solution was selected. |  |
| Design | The use of AI is a good fit for the  solution. The new user experience is clearly documented showing how users will be better served than they are today. | The use of AI is a good fit for the solution and there is some documentation about how it meets the needs of users. | The use of AI is a good fit for the solution. |  |
| Data | Relevant data to train the AI model have been identified as well as how the data will be sourced or collected. There is evidence that the dataset is balanced, and that safety and privacy have been considered. | Relevant data to train the AI model have been identified as well as how the data will be sourced or collected. There is evidence that the dataset is balanced. | Relevant data to train the AI model have been identified as well as how the data will be sourced or collected. |  |
| Prototype | A prototype for the solution has been created and successfully trained to meet users’ requirements. | A prototype for the solution has been created and trained. | A concept for a prototype  shows how the AI model will work |  |
| Testing | A prototype has been tested with a fair representation of users and all tasks in *Section 9 Testing* have been completed. | A prototype has been tested with users and improvements have been identified to meet user requirements. | A concept for a prototype shows how it will be tested. |  |
| Team  collaboration | Effective team collaboration and communication among peers and stakeholders is clearly documented in *Section 10 Team collaboration*. | Team collaboration among peers and stakeholders is clearly documented in *Section*  *10 Team collaboration*. | There is some evidence of team interactions among peers and stakeholders. |  |
| Individual learning | Each team member presents a reflective and insightful account of their learning during the project. | Each team presents an account of their learning during the project. | Some team members  present an account of their learning during the project. |  |
| Total points |  |  |  |  |

**VIDEO PRESENTATION**

|  |  |  |
| --- | --- | --- |
| **Criteria** | | **Points Given**    3 – excellent  2 – very good  1 – satisfactory |
| Communication | The video is well-paced and communicated, following a clear and logical sequence. |  |
| Illustrative | Demonstrations and/or visuals are used to illustrate examples, where appropriate. |  |
| Accurate language | The video presents accurate science and technology and uses appropriate language. |  |
| Passion | The video demonstrates passion from team members about their chosen topic/idea. |  |
| Sound and  image quality | The video demonstrates good sound and image quality. |  |
| Length | The content is presented in the video within a 3-minute timeframe. |  |
| Total points | |  |