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: _____

SCHOOL NAME: _____

YEAR/CLASS: _____

TEACHER NAME: _____

TEACHER EMAIL: _____

TEAM MEMBER NAMES AND GRADES:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

Note: *Add more rows if there are more members in your team*

1. 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.

2. Team Roles

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

Role	Role description	Team Member Name

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								
	Set up a team folder on a shared drive								
Defining the problem	Background reading								
	Research issues in our community								
	Team meeting to discuss issues and select an issue for the project								
	Complete section 3 of the Project Logbook								
	Rate yourselves								
Understanding the users	Identify users								
	Meeting with users to observe them								
	Interview with user (1)								
	Interview with user (2), etc…								
	Complete section 4 of the Project Logbook								
	Rate yourselves								
Brainstorming	Team meeting to generate ideas for a solution								
	Complete section 5 of the Project Logbook								
	Rate yourselves								
Designing your solution	Team meeting to design the solution								
	Complete section 6 of the logbook								
	Rate yourselves								

Collecting and preparing data	Team meeting to discuss data requirements								
Collecting and preparing data Prototyping	Data collection								
	Data preparation and labelling								
	Complete Section 6 of the Project Logbook								
	Team meeting to plan prototyping phase								
Prototyping Testing	Train your model with input dataset								
	Test your model and keep training with more data until you think your model is accurate								
	Write a program to initiate actions based on the result of your model								
	Complete section 8 of the Project Logbook								
	Rate yourselves								
	Team meeting to discuss testing plan								
Testing Creating the video	Invite users to test your prototype								
	Conduct testing with users								
	Complete section 9 of the Project Logbook								
	Rate yourselves								
	Team meeting to discuss video creation								
	Write your script								
	Film your video								
	Edit your video								
Completing the logbook	Reflect on the project with your team								

	Complete sections 10 and 11 of the Project Logbook								
	Review your Project logbook and video								
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?

How often will you come together to share your progress?

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

What tools will you use for communication?

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

Date of meeting:
Who attended:
Who wasn't able to attend:

Purpose of meeting:

Items discussed:
1.
2.
3.

Things to do (what, by whom, by when)
1.
2.
3.

3. Problem Definition

3.1 List important local issues faced by your school or community

3.2 Which issues matter to you and why?

3.3 Which issue will you focus on?

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

How can we help _____ [a specific user or group of users] find a way to _____ [do what] so that they can _____ [do something not done before that can be measured].

Rate yourself ☐

Problem Definition

1 point - A local problem is described
2 points - A local problem which has not been fully solved before is described.
3 points - A local problem which has not been fully solved before is explained in detail with supporting research.

4. The Users

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

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

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

4.4 Empathy Map

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

What our users are saying	**What our users thinking**
What our users are doing	**How our users feel**

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

1.

2.

3.

4.

5.

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7.

8.

9.

10.

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

_____ [a specific user or group of users]

are experiencing issues with _____ [problem] today

because of _____ [cause]

Rate yourself ☐

The Users

1 point - The user group is described but it is unclear how they are affected by the problem.
2 points - Understanding of the user group is evidenced by completion of most of the steps in this section.
3 points - Understanding of the user group is evidenced by completion of most of the steps in this section and thorough investigation

5. Brainstorming

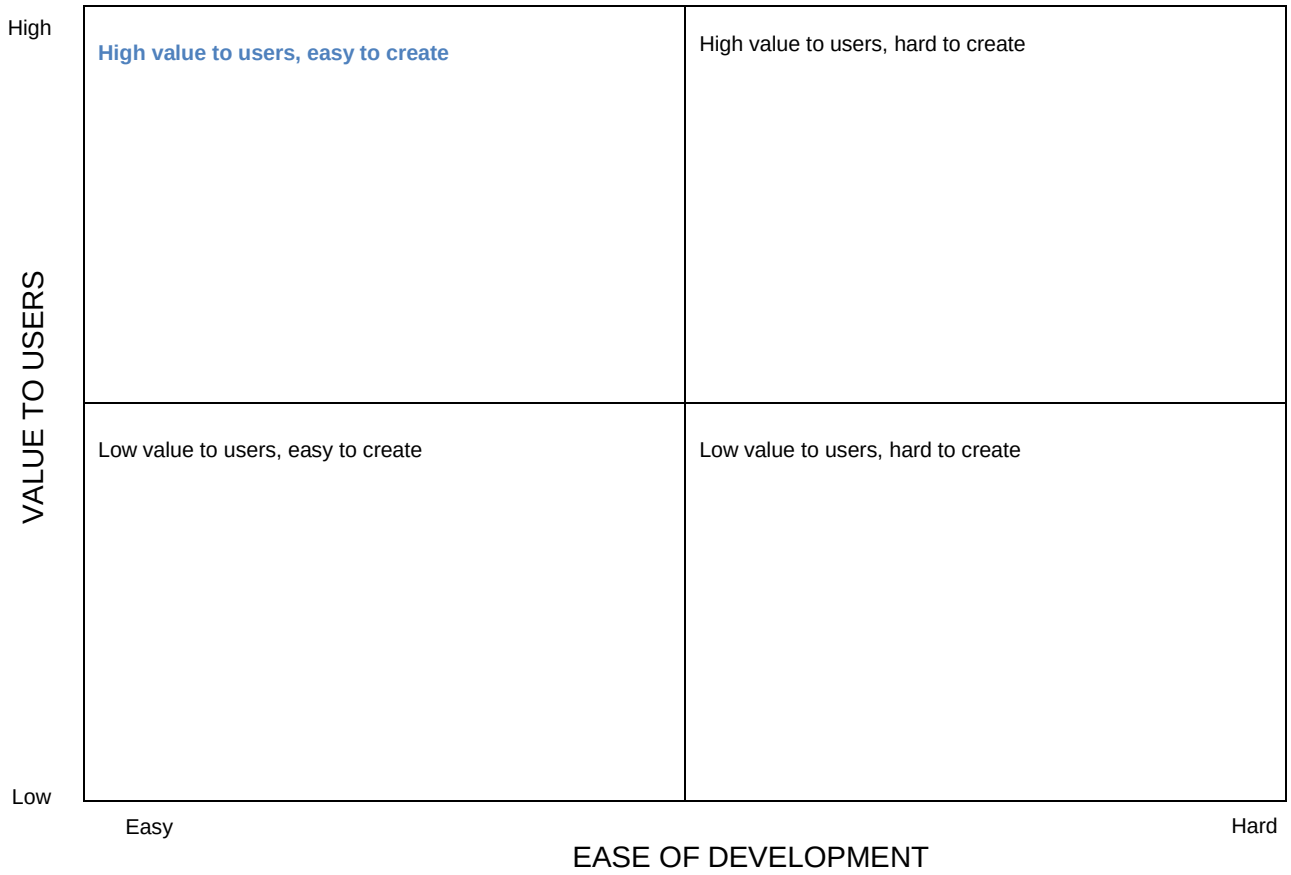
5.1 Ideas

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	
AI Idea #2	
AI Idea #3	
AI Idea #4	
AI Idea #5	

5.2 Priority Grid

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



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.

Rate yourself ☐

Brainstorming

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

6. Design

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

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

Rate yourself ☐

Design

1 point – The use of AI is a good fit for the solution.
2 points - The use of AI is a good fit for the solution and there is some documentation about how it meets the needs of users
3 points - 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.

7. Data

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

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				
Want/Need				
Nice to have				

Rate yourself ☐

Data

1 point – Relevant data to train the AI model have been identified as well as how the data will be sourced or collected.
2 points - 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.
3 points - 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.

8. Prototype

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

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

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

Rate yourself ☐

Prototype

1 point – A concept for a prototype shows how the AI model will work.
2 points - A prototype for the solution has been created and trained.
3 points - A prototype for the solution has been created and successfully trained to meet users' requirements.

9. Testing

9.1 Who are the users who tested the prototype?

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

9.3 Complete the user feedback grid

What works	What needs to change
Questions?	Ideas

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

9.5 What improvements can be made later?

Rate yourself ☐

Testing

1 point – A concept for a prototype shows how it will be tested.
2 points - A prototype has been tested with users and improvements have been identified to meet user requirements.
3 points - A prototype has been tested with a fair representation of users and all tasks in this section have been completed.

10. Team collaboration

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

Rate yourself ☐

Team collaboration

1 point – There is some evidence of team interactions among peers and stakeholders.
2 points - Team collaboration among peers and stakeholders is clearly documented in this section.
3 points - Effective team collaboration and communication among peers and stakeholders is clearly documented in this section.

11. 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:

Team member name:

Team member name:

Team member name:

Team member name:

Team member name:

Note: *Add more boxes if there are more members in your team*

Rate yourself

Individual Learning Reflection

1 point – Some team members present an account of their learning during the project.
2 points - Each team presents an account of their learning during the project.
3 points - Each team member presents a reflective and insightful account of their learning during the project.

12. Video link

Enter the URL of your team video:

Enter the password (if any):

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		