

#### About this template document:

- This document contains 4 individual "Meeting Notes and Agendas" templates, corresponding to your team's required Al Studio monthly meetings for September 2023.
- During the month of September, your team will use this document to create and keep track of all of your meeting agendas and meeting notes.
- For future months (October and November), simply make a copy of this template document and use it in the same way for your meetings in those months.
- Each month's document should be stored in your team's Project Folder in Google Drive, for easy access by team members; your Al Studio TA; and the Break Through Tech Al Program Team.
- You are not required to use this document for your August 2023 team meetings or for Maker Days, but you are welcome to! It might help you get practice and get into the habit :-)
- You can review an example in the Bridge to Studio module of your Al Studio course in Canvas, on the page titled, "Team Breakout: Team Resources".

#### Important reminders:

- Your team will need to upload and submit its meeting notes and agendas 2x/month (Sept-Nov). Submission instructions will be provided via your Al Studio course in Canvas.
- 48 hours prior to each scheduled Challenge Advisor and AI Studio TA meeting, your team will need to send an agenda to your Challenge Advisor(s) and/or TA. Depending on their preference, you can either share a link to this Google Drive document (using the "Share" button above), or draft your agenda in this document and copy/paste it into an email for their review.

#### Jump to meeting-specific templates:

- Monthly Meeting #1: Full Group Meeting
- Monthly Meeting #2: Team Meeting
- Monthly Meeting #3: Challenge Advisor Meeting
- Monthly Meeting #4: Al Studio TA

## **Monthly Meeting #1: Full Group Meeting**

| Meeting Date:                                      | Sep 2, 2023                                                                                                                                                         |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Meeting Time:                                      | Maker Day                                                                                                                                                           |
| Meeting Location:                                  | In-person *                                                                                                                                                         |
| Meeting Type:                                      | Challenge Advisor Meeting •                                                                                                                                         |
| Student Team Members: (check box if in attendance) | <ul> <li>☑ [Nicole Escamilla]</li> <li>☑ [Aissatou Thiombane]</li> <li>☑ [Andres Vicente] {virtual}</li> <li>☑ [Reshma Sheikh]</li> <li>☑ [Bonnie White]</li> </ul> |
| Other Attendees:<br>(e.g., Challenge Advisor, TA)  | TA - Swagath Babu (Virtual)                                                                                                                                         |

#### **MEETING AGENDA**

- I. Introductions ~5 min
- II. Filled out Canvas Meeting times & set best dates ~10 min
- III. Studied dataset & Familiarized with it more ~ 30 min
- IV. Looked at prompt again to better understand the goals of our project, made notes in our group document for all important topics ~60 min
- V. Started to clean the data and one-hot encode categorical data ~90 min
- VI. Summarize key meeting takeaways and confirm next meeting date/time ~5 min

| Discussion Topic                                                                                      | Notes                                                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| When looking at data, we realize that would end up with a lot of columns if we were to one hot encode | Is there a smarter way to go about it We learned about the .split() .explode() function, .unique() to split string data in columns to unique columns for one hot encoding |

| The purpose of this project being a machine learning task is the ability to have an answer to every unique case based on previous trained data. | <ul> <li>Yes We Inspect will help</li> <li>No, Not much of a correlation found</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Solidify what questions we want answered in the model                                                                                           | Given symptoms, tell us which mold is likely to be correlated Given molds, tell us which symptoms are likely to me correlated Possible diagnosis -> increased vulnerability to toxins We want model to return y/n mold is affecting these symptoms  • We don't think this could be answered because we need data on people who are healthy as well  • Or specifically other people with and those molds not showing symptoms  • We need data on successful cases They want customers to go to their website and interact with this model to tell them if We Inspect's intervention would be needed |

| Task/Assignment               | Team Member | Deadline     |
|-------------------------------|-------------|--------------|
| One hot encode script (try)   | All         | Sep 26, 2023 |
| One hot encode script debug   | All         | Sep 26, 2023 |
| One hot encode script working | All         | Sep 26, 2023 |

# **Monthly Meeting #2: Team Meeting**

| Meeting Date:                                      | Sep 12, 2023                                                                                                                                              |
|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Meeting Time:                                      | 7:30 pm - 8:30 pm                                                                                                                                         |
| Meeting Location:                                  | Virtual •                                                                                                                                                 |
| Meeting Type:                                      | Team Meeting •                                                                                                                                            |
| Student Team Members: (check box if in attendance) | <ul> <li>☑ [Nicole Escamilla]</li> <li>☐ [Aissatou Thiombane]</li> <li>☐ [Andres Vicente]</li> <li>☑ [Reshma Sheikh]</li> <li>☑ [Bonnie White]</li> </ul> |
| Other Attendees:<br>(e.g., Challenge Advisor, TA)  |                                                                                                                                                           |

### **MEETING AGENDA**

VII. Review Meeting Notes and Agenda sheet to make sure it is updated

| Discussion Topic                | Notes                                                                                                                       |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Deliverables                    | <ul><li>We took care of filling given templates</li><li>Designated someone to turn in</li><li>Agreed on deadlines</li></ul> |
| Data manipulation script        | - Questions & Notes<br>- Asdsad<br>- A<br>- d                                                                               |
| Deal with null / NA in database | <ul> <li>List of null values given in dataset</li> <li>Ne</li> <li>Nd</li> <li>Etc</li> <li>Turn them all to 0s</li> </ul>  |

| While workload is still relatively light, for scripting and cleaning we will allow everyone to try their own hand at the task, and then we will compare code, debug & clean at next meeting. All question are welcome! |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| meeting. All question are welcome!                                                                                                                                                                                     |

| Task/Assignment               | Team Member | Deadline     |
|-------------------------------|-------------|--------------|
| Attempt to Clean Data         | All         | Sep 26, 2023 |
| Attempt to manage null values | All         | Sep 26, 2023 |

## **Monthly Meeting #3: Challenge Advisor Meeting**

| Meeting Date:                                      | Sep 22, 2023                                                                                      |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------|
| Meeting Time:                                      | 12:00                                                                                             |
| Meeting Location:                                  | Virtual •                                                                                         |
| Meeting Type:                                      | Full Group Meeting *                                                                              |
| Student Team Members: (check box if in attendance) | ☐ [Nicole Escamilla] ☐ [Aissatou Thiombane] ☐ [Andres Vicente] ☐ [Reshma Sheikh] ☐ [Bonnie White] |
| Other Attendees:<br>(e.g., Challenge Advisor, TA)  | TA - Swagath Babu (Virtual)                                                                       |

#### **MEETING AGENDA**

- VIII. Share what our plan is and what we have been working on since the last meeting
- IX. Share what we are planning to do next with the data
- X. Clarify Model Goal
- XI. [Discuss advancements in dataset preparation completed during Maker Day #1.
- XII. [Brainstorm ideas on further data preparation and clean-up with TA.
  - A. Pick Models, Look at useful pathways
- XIII. Establish October Meeting Dates

| Discussion Topic  | Notes                                                                                                                                                                                                 |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model Suggestions | <ul> <li>Look into random forest</li> <li>Unsupervised and clean data, use model and find output</li> <li>Website will have input data, what can be the mold type, likelihood of mold type</li> </ul> |

| Finished product                                         | <ul> <li>What do we want the model to answer? <ul> <li>The other team is symptoms -&gt; mold</li> <li>We will be building mold -&gt; symtoms</li> </ul> </li> <li>Do we need a website or are we only making a backend?</li> <li>Data is coming from <ul> <li>Doctor says there is mold and dust is collected</li> <li>PCR tech to pinpoint mold <ul> <li>Y/N issue</li> </ul> </li> <li>Then they find what we can do to fix it</li> </ul> </li> <li>Do they have a website <ul> <li>Have website</li> <li>Have separate website called dust test</li> <li>Create a separate landing page that allows users to get access to models, find a way to link it to people as their buying to use.</li> <li>We have our own webpage</li> </ul> </li> </ul> |
|----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                          | <ul> <li>Molds and their effect on neuo disorders. Some people of theirs were speaking there. They work a lot with kids. There are full days focused on this topic.</li> <li>Autism in 80's 1 in every 2,000 and now its 1:27</li> <li>He thinks environmental factors and everything are a big reason. Not quite biological.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                              |
| Change the air foundation                                | <ul> <li>Lots of influencers acting in it (gwenith paltro and more)</li> <li>Telling them what we are doing got them excited</li> <li>This tool made people happy to help them</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Some values have * in them, what is the reason for that? | <ul> <li>Remove stars to help model, the star does not represent anything</li> <li>ND &lt;1 and ND &lt;2 what is the meaning         <ul> <li>Only one value &lt;2 can be changed to 0</li> <li>Not much of a difference</li> <li>So can ND &lt; 1</li> </ul> </li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Our next steps                                           | <ul> <li>Visualize data</li> <li>From visualization, determine what is a good model to decide</li> <li>Open PDI, upload file there and we can ask question to that he will share links. Research can really expedited with this.</li> <li>https://www.chatpdf.com/</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

| Symptoms vs<br>Diagnosis?                           | <ul> <li>Do we look at symptoms &amp; diagnosis</li> <li>Mold and symptoms would be the features</li> <li>Is the diagnose column a label</li> <li>Symptoms are the result</li> <li>Both are outputs</li> <li>This ability really helps</li> </ul>                                                         |
|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Future Meeting Dates<br>Double Check &<br>Conflictd | He has calender invites The 6th is a potential conflict And October 20th is also a conflict Switch join time may be needed Next week the 29th or the 13th depending on availability Maker day is 6th and 13th works well 13th will be our next meeting day. Then the next meeting will be the 27th of OCT |
| Other notes                                         | Ignore rows with, doesnt have a state no location and no pin                                                                                                                                                                                                                                              |
|                                                     |                                                                                                                                                                                                                                                                                                           |

| Task/Assignment         | Team Member | Deadline     |
|-------------------------|-------------|--------------|
| Finish Up Data Cleaning | All         | Sep 15, 2023 |
| Visualize Data Research | All         | Sep 15, 2023 |
|                         |             | Sep 29, 2023 |
|                         |             | Sep 29, 2023 |

# **Monthly Meeting #4: AI Studio TA Meeting**

| Meeting Date:                                         | Sep 26, 2023                                                                                                                                              |
|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Meeting Time:                                         | 12:30 PM                                                                                                                                                  |
| Meeting Location:                                     | Virtual •                                                                                                                                                 |
| Meeting Type:                                         | Team Meeting •                                                                                                                                            |
| Student Team Members:<br>(check box if in attendance) | <ul> <li>✓ [Nicole Escamilla]</li> <li>✓ [Aissatou Thiombane]</li> <li>✓ [Andres Vicente]</li> <li>✓ [Reshma Sheikh]</li> <li>✓ [Bonnie White]</li> </ul> |
| Other Attendees:<br>(e.g., Challenge Advisor, TA)     | TA - Swagath Babu                                                                                                                                         |

### **MEETING AGENDA**

XIV. Check-in

XV. Review from last week's meeting

XVI. Data cleaning code review / Q & A / Progress Notes

XVII. Set goals for future, set ideal deadlines for each goal & estimated dedicated time

XVIII. Verify Meeting times for the month of october

XIX. Review Meeting Notes & Agenda for turn in

| Discussion Topic | Notes                                                                                                                             |  |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------|--|
| Data Preparation | <ul> <li>Change * values</li> <li>&lt;1 &lt;2 values need to go to 0</li> <li>Empty columns and rows needs to be fixed</li> </ul> |  |

| Visualizing Data     | Use clustering technique and visualize data for symptoms                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model Selection      | <ul> <li>Research potential models to be used (Unsupervised Learning)</li> <li>Compile a list and choose the top 5 to further improve</li> <li>On todo list for this week</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Aithio's Code Review | <ul> <li>Section 1 is Nicole's starter work</li> <li>Imported libraries and Reading in CSV</li> <li>Extracted Unique Values</li> <li>System symptom list clearing         <ul> <li>Dropped Nan values</li> <li>Replaced all "" with 0s</li> <li>An old column with respective systems (One hot encoding)</li> <li>Lamda is replaced " " with "" fixes unique values</li> </ul> </li> <li>We still have NAN nds and odd values         <ul> <li>He told us to focus on it</li> <li>Filtered all of them and replaced NAns</li> </ul> </li> <li>Made a list of all values to be replaced, made a for loop to loop through each column         <ul> <li>Went to the original data frame and changed all values to</li> </ul> </li> <li>Any star got replaced with ""</li> <li>Spaces also deleted</li> <li>The original data frame changed</li> <li>Redoing it, seeing if values didn't change</li> <li>Notes from the meeting have not been applied to data frame yet</li> <li>Loc - for all nonempty slots, ignore anything that is empty or 0, ignore empty rows</li> <li>For every box where 0 does not equal 0</li> <li>Every symptom will uniquely pop up, so if one symptom shows up in different columns in one row, it only hot encodes it once, into one category</li> </ul> |

| Task/Assignment                                                                                                                                                                                                                                                  | Team Member  | Deadline    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-------------|
| Have a list of potential models to use  - Try to find 1-2 hours of time this week  - Put findings in Research Google Doc  - Look for: Potential Models, Other projects built doing similar things, research articles found  - Any visual exploration of our data | All members. | Oct 3, 2023 |
| Have a prepared/cleaned-up dataset.                                                                                                                                                                                                                              | All members. | Oct 3, 2023 |
| Address all notes given in sept 22 meetings                                                                                                                                                                                                                      | All members. | Oct 3, 2023 |
| Change Google Invite to Cory for correct dates 13, 27                                                                                                                                                                                                            | Aissatou     |             |
| Notify TA For October meeting dates - 3ed, 17th, 31st on Tuesdays at 7:30 - 13th at Noon with Cory                                                                                                                                                               | Done         |             |