Neurodiversity Application Workflow

# I. Project Initiation

1. Define the Project Scope
2. Set Clear Objectives
3. Establish Key Performance Indicators (KPIs)

# II. Research and Data Collection

1. Identify and Gather Data on Neurological Diversity
2. Research Existing Solutions and Best Practices
3. Gather User Preferences and Needs

# III. Sound Detection Model

1. Develop a Machine Learning Model for Sound Detection
2. Implement Counter Measures for Triggered Sounds
3. Implement Livestream Mood Detection
4. Upgrade Model with Real-time Insights
5. Integrate Emergency Notification System

# IV. Therapy Bot

1. Design and Develop a Conversational Chatbot
2. Implement Natural Language Processing (NLP) for User Conversations
3. Provide Insights and Emotional Support
4. Enable Learning from User Interactions
5. Implement Emergency Response within the Chatbot

# V. Report Generation

1. Combine Results from Sound Detection and Therapy Bot
2. Generate Comprehensive Reports
3. Include User Insights, Mood Data, and Customized Recommendations
4. Regularly Share Reports with LLM (Long-term Memory Model)

# VI. Application Development

1. Design and Develop the Application Interface
2. Integrate Sound and Mood Detection Features
3. Implement Therapy Bot Functionality
4. Enable User Interaction with Insights and Recommendations

# VII. Testing and Iteration

1. Conduct User Testing for Sound Detection and Therapy Bot
2. Gather Feedback on Livestream and Emergency Notifications
3. Iterate on the Application Based on Feedback
4. Ensure Accessibility and Usability

# VIII. MVP (Minimum Viable Product) Development

1. Prioritize Essential Features for the Initial Release
2. Develop the MVP Within the 15-Day Timeline
3. Conduct Internal Testing for Sound and Therapy Components

# IX. Team Collaboration and Communication

1. Set Up Regular Team Meetings
2. Use Collaboration Tools (e.g., Slack, Trello) for Communication
3. Encourage Open Communication and Feedback

# X. Documentation and Reporting

1. Document Code, Models, and Processes for Sound Detection and Therapy Bot
2. Create Progress Reports for Internal and Stakeholder Review
3. Prepare a Final Report Combining Sound and Therapy Results

# XI. Presentation to NUS Professors

1. Create a Comprehensive Presentation of the Project
2. Highlight Key Features, Innovations, and Impact of Sound and Therapy Components
3. Address Questions and Feedback from Professors