Intern Project Instruction Sheet

Task Overview

You will be working on creating innovative IoT projects using Sixfab's LTE/4G Cellular Modem Kit, Pico LTE, Jetson Nano Modem Kit or Sixfab 5G Modem Kit. Your task includes categorizing Sixfab products, brainstorming original project ideas within major product categories, preparing comprehensive documentation, and publishing your completed projects on online platforms.

Task Breakdown

Step 1: Categorize Products

- Review and research the following Sixfab products:
    - Sixfab LTE/4G Cellular Modem Kit
    - Pico LTE
    - Sixfab 5G Modem Kit
- Clearly categorize these products based on:
    - Connectivity type
    - Application scenarios
    - Complexity level

Step 2: Generate Project Ideas

- Brainstorm unique, non-existent project ideas using the categorized products.
- Aim for creativity and real-world applicability.
- Each idea should include:
    - Project title
    - Brief objective
    - Intended Sixfab product(s)
    - Required components and sensors
    - Skill level required

Step 3: Prepare Documentation

For each finalized project, create thorough documentation including:

- Introduction and objective
- Hardware requirements and detailed component list
- Step-by-step assembly and setup instructions

- Software setup and coding instructions
- Troubleshooting guide with common issues and solutions
- Potential improvements or extensions of the project

Documentation Format: Markdown or PDF, clearly structured for readability.

Step 4: Reporting

Prepare a concise report for each completed project covering:

- Project summary and objectives achieved
- Challenges faced and solutions applied
- Lessons learned
- Suggestions for future work or improvements

Step 5: Publish Online

Publish your documented projects on Hackster.io or similar IoT community platforms:

- Create a clear and engaging project page
- Include step-by-step instructions and images
- Clearly mention the Sixfab products and their benefits
- Engage with the community by responding to questions and feedback

Final Deliverables

By the end of the internship period, submit:

- Product categorization document
- A list of innovative project ideas
- Comprehensive documentation for each selected project
- Reports summarizing each project
- Links to published online project pages

Resources

- Use ChatGPT extensively for:
  - Ideation and research
  - Code generation and debugging
  - Troubleshooting hardware and software issues
  - Writing clear and professional documentation

Feel free to ask questions or seek clarification as needed. Good luck!