# Hackathon Theme: "AI-Powered Startup: The Best Business Plan"

## Goal:

Teams will design prompts that instruct a large language model (LLM) to generate a comprehensive and compelling business plan (executive summary, market analysis, financial/capital projections, etc.) for a novel startup idea.

The following will be provided at the beginning of the Hackathon:

· Industry the business must be in {think of an app for the agriculture or fishing industry}

· The geographic region {Chesapeake}

· The available capital: three phases {$5,000, $20,000, $100,000}

## Format:

4-day hybrid. Day 1 will include training on LLMs and prompt engineering, entrepreneurship, and business plans. Day 2 and 3 will be the actual competitions. And Day 4 will be presentations. Award ceremony will be held on May 1st at the Workforce Summit

## Rules:

* Teams develop and refine their prompts, focusing on clarity, specificity, and the ability to guide the LLM to produce a high-quality business plan.
* Teams can use any LLM they want but they will have to try their prompts in at least five models (either different LLMs like Grok, Gemini, Claude, ChatGPT, or different flavors/versions of those models) and provide a rationale as to why they picked the LLM they did.
* Teams should experiment with different prompt structures and techniques (e.g., few-shot learning, role-playing, CoT, etc.)
* Teams use their prompts to generate business plans using the chosen LLM. Teams can refine the LLM's output by providing follow-up prompts but they **cannot** make direct edits to the business plans.
* Teams prepare a short pitch (3 minutes max) to present their startup idea and business plan to the judges by using an LLM.
* Teams can assign specific roles to members (e.g., prompt engineer, business analyst, presenter).
* Business plans should be limited to a maximum of 15 pages.
* Teams can access market research reports, industry statistics, etc.
* Teams will also have to provide the prompt sequenced they used as well as any data and it the result needs to be replicable.

## Deliverables:

* Business Plan (Evaluation Rubric D, B, C)
* Prompt(s) (Evaluation Rubric E)
* Thought process document (Evaluation Rubric F)
* Pitch (either recorded or virtual) (Evaluation Rubric A)

## Evaluation Rubric:

1. Best Pitch (10%):

* Clarity & Conciseness: How effectively does the pitch communicate the key aspects of the business plan?
* Persuasiveness: How compelling and convincing is the pitch?
* Presentation Skills: How engaging and professional is the team's presentation?
* Q&A responses: How well did the team handle the judges' questions?

1. Most Creative Idea (10%):

* Novelty: How unique and innovative is the startup idea?
* Market Potential: Does the idea address a real need or opportunity in the market?
* Wow Factor: How exciting and engaging is the overall concept?

1. Most Implementable Business Idea (10%):

* Feasibility: How realistic and practical is the proposed business model?
* Operational Plan: Does the business plan outline a clear and logical plan for operations?
* Resource Allocation: Does the plan demonstrate a realistic understanding of the resources required?
* Risk Assessment: Does the plan identify and address potential risks?

1. Best Business Plan (20%):

* Executive Summary: Is the summary clear, concise, and compelling?
* Market Analysis: Is the market research thorough and accurate?
* Competitive Analysis: Does the plan identify and analyze key competitors?
* Financial Projections: Are the financial projections realistic and well-supported?
* Marketing & Sales Strategy: Is the marketing and sales strategy well-defined?
* Overall Coherence: Is the business plan well-organized and easy to understand?
* Prompt Effectiveness: How well did the prompt guide the LLM to produce a high-quality plan?
* Use of data: Does the business plan use supporting data effectively?

1. Best Prompt (30%):

* Clarity and Specificity: How well-defined and unambiguous is the prompt?
* Efficiency: How effectively does the prompt guide the LLM to generate the desired output with minimal ambiguity or wasted tokens?
* Structure and Organization: Is the prompt logically structured and easy to understand?
* Innovation and Technique: Does the prompt demonstrate creative use of prompt engineering techniques (e.g., few-shot learning, role-playing, prompt chaining)?
* Robustness: How well does the prompt perform across multiple executions or slight variations in input?
* Instruction following: How well did the LLM follow the instructions of the prompt?

F) LLM Model Selection (20%):

* Rationale for why you picked the LLM model you used to generate the business plan.
* Which model was second best and why?
* What are some limitations of the LLM models you used, and what features would you wish for?
* Present the iterations of your prompts and elaborate on the different techniques you used (Chain of Thought, Tree of Thought, Chain of Feedback, etc.) and why.