Fireworks Project

First Principles:

1. **Define the Problem**: Clearly articulate the challenge or goal to address.
2. **Deconstruct Assumptions**: Break the problem into its core components and question every assumption.
3. **Identify First Principles**: Determine the fundamental truths or constraints underlying the problem.
4. **Reconstruct Solutions**: Use these principles to ideate novel, logical solutions.
5. **Prototype and Test**: Build and validate concepts through iterative experimentation.
6. **Refine and Scale**: Optimize the solution and implement at scale.

Understanding the project:

* Problem: Extract relevant information across various types of documents such as Passports and Drivers licenses to create an Identity Verification solution for a FSI enterprise
* Core Components:
  + Document upload (images – passports/licences)
  + Document data extraction
    - PNG, JPG, and JPEG images
  + Identity validation
    - Valid form of identification (Passport or Drivers License)
    - Complete and correct (in right format) data
    - Customer Identification (CIP) requires validation of name, date of birth, address, and identification number

\*\* The key component is extracting the data correctly

\* My first thought is to use image to text – let’s see how that works

Testing the Llama 3.2 90B Vision Instruct model in the Fireworks playground

\*\* Image needs to be before text in User Content – Seems off in docs! \*\*

Building the PoC

Stripe Identity

Design Requirements

* + Document upload (images – passports/licences)
  + Document data extraction
    - PNG, JPG, and JPEG images
  + Identity validation
    - Valid form of identification (Passport or Drivers License)
    - Complete and correct (in right format) data
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Dev Process:

* Image MUST be before the user prompt – seems off in the documentation but I saw the warning at the top of the docs
* Llama 3.2 90B needed clarification to ensure it doesn’t hallucinate/use it’s own knowledge to fill data (Ben Franklin)
* Using 405B for verification right now since it is able to understand more complexities – may bump down