Hackathon Problem Statements

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Project criteria to consider

- Innovation
    - Is this project doing something really different from anything else on the market?
    - Is this project approaching an existing problem in a different enough way that it's new?
- Feasibility
    - Would a fully fleshed out version of the project scale on existing hardware?
    - Are there any technical or design limitations that would make this project not shippable?
- Technical accomplishment
    - Does this project stretch the technological imagination?
    - Is the project surprising in how it architects together many technologies to solve a problem?

YOU HAVE TO SELECT ANY ONE OF THE LISTED TWO PROBLEM STATEMENTS AND SOLVE IT.

Problem statements

- Problem 1: Classification and processing of unstructured financial documents
    - Appian Credit Union receives thousands of documents in PDF form everyday.
    - These documents include, but are not limited to:
        - Applications for bank accounts (credit card, savings account)
        - Identity documents (driver's license, state/country identification, passport)

- - - Supporting financial documents (income statements/paystubs, tax returns)
      - Receipts
  - These documents have been manually verified and organized up till now. This process takes an extremely long time, and it is repetitive to the employees of Appian Credit Union.
  - Appian Credit Union wants to leverage technology to make a first "best effort" categorization and summarization of documents to help speed up the process.
  - Categorization should be hierarchical in the following way:
    - Person
      - Make sure to associate the document to the correct person using information such as name, government ID #, email address
    - Type of document
      - Identify the type of document and group it with other types of same documents

- **Problem 2: Automatic modernization of any HTML page**

  - Appian Website Builder allows users to create and customize websites using a drag-and-drop interface and direct HTML editing.

  - However, the quality of the generated websites varies significantly depending on the user's design skills and knowledge of web development best practices. This inconsistency can lead to unattractive, inaccessible, or poorly structured websites, which reflect negatively on the tool itself rather than the user.

  - To address this, Appian Website Builder needs a feature that automatically applies modern web design and development best practices to user-generated HTML. This feature should improve the aesthetic appeal, accessibility, semantic structure, and responsiveness of the websites. It must provide users with the flexibility to preview, customize, and selectively accept changes, ensuring their creative freedom is preserved while enhancing the overall quality and usability of their websites.

    - This includes, but is not limited to:
      - Aesthetic appeal such as consistent fonts, appealing colors, padding and margins
      - Accessibility (screen readers, keyboard navigation)
      - Usage of semantic HTML tags
      - Responsive design

    - Rather than take an all-or-nothing approach, Appian Website Builder

wants to provide users a series of choices of what sort of modifications to accept.