Overview

This proposal outlines the development of a **Kendo Tournament Planner**, a web application designed to address current gaps in organizing and managing kendo tournaments. The system aims to automate the generation of tournament brackets and streamline the process of scorekeeping, ultimately reducing manual errors, saving time, and improving the overall experience for organizers, and spectators.

This project was initiated to fill a noticeable gap in the existing tournament organization process, where much of the work is done manually, leading to potential errors and inefficiencies. The app will be designed with two major components: **automated tournament bracket generation** and **dynamic score input** via a user-friendly interface.

This project is **community-driven** and **not intended for profit**. The primary goal is to improve the tournament experience for kendo practitioners by addressing real-world challenges observed in past events.

Identified Gaps

Several key challenges and gaps have been observed from past year tournaments:

- **Manual Bracket Creation**:
  Tournament organizers, typically club executives, spend a significant amount of time creating the brackets manually. They must consider various participant details such as rank, gender, age, and dojo affiliation to ensure fair matchups. This manual process is not only labor-intensive but also leaves room for mistakes and inconsistencies.

  Each tournament often has a unique set of criteria, meaning that even experienced organizers need to dedicate considerable time to review and plan each event's brackets from scratch.

- **Gaps in Current Scorekeeping System**:

In past tournaments, organizers relied on a combination of tools such as excel spreadsheets, physical paper, and poster boards to keep track of match results. While functional, this method is prone to errors like inconsistent score entries.

Further, there is no centralized way to track tournament results for future reference. The lack of a unified system makes it difficult to review tournament histories or keep a clean record of match outcomes.

- **No Centralized History or Collaboration**:
  Currently, there's no streamlined way to store and access past tournament records. Collaboration between multiple organizers has been challenging, as there is no single platform where everyone can work together in real-time, particularly when tournaments require contributions from multiple people (e.g., scorekeepers from different courts).

Project Scope

The **Kendo Tournament Planner** will address these gaps by providing a centralized, automated solution for both tournament organization and scorekeeping. The system is designed with scalability in mind, allowing for future expansion to accommodate kendo clubs beyond UTKC. The scope includes two primary features:

PRIMARY FEATURES

1. **Automated Bracket Generation**:
   The system will allow users to upload a **.csv** file (exported from Google Forms) containing participant data, including key details such as rank, gender, age, and dojo affiliation.

   Based on this information, the app will generate tournament brackets automatically, significantly reducing the time required to plan matchups. Bracket generation will consider multiple factors to ensure fairness and balance.

After the brackets are generated, users will have the ability to make manual adjustments if needed. This flexibility allows for last-minute changes or specific tournament requirements that the automatic system may not fully account for.

2. **Dynamic Score Input Interface**:
   A dynamic score input interface will allow users to record scores directly into the tournament brackets in real-time. The interface will display the tournament brackets and offer an intuitive way to input scores via a toolbar with buttons for kendo scores (e.g., 'M' for Men, 'K' for Kote, 'D' for Do, and 'T' for Tsuki).

   Once a match is complete (i.e., a participant scores twice), the winner will automatically advance to the next round, and the tournament bracket will be updated accordingly. Similarly, two hansokus ('H') will automatically be converted to an ippon ('I'). This automation reduces the chance of human error in determining match outcomes.

   The tournament organizer will have the ability to save the brackets and scores at any point, with an option to **export the brackets and scores as a PDF** for offline use, sharing, or printing.

SECONDARY FEATURES

1. **Collaboration and Real-Time Updates:**
   The system will enable **multi-user collaboration**, allowing tournament organizers and scorekeepers to work together on the same event in real-time. With this feature, multiple users can log into the platform simultaneously and input scores or make adjustments without risk of data loss or duplication. Any changes will be reflected instantly across all connected devices.

   Collaboration is especially important during larger tournaments where multiple courts are managing different matches concurrently. Real-time updates ensure that the tournament runs smoothly and all relevant personnel are informed of progress in real-time.

2. **Event History and Record Keeping:**
   A dedicated **Events Page** will display a list of past tournaments, along with their results and brackets, stored in the system for easy reference.

   Tournament organizers will have the option to view past event details and export data. This feature ensures long-term record-keeping and provides a learning opportunity for future organizers by reviewing how past events were structured.

Technical Features and Functionality

- **User Authentication and Roles**:
  Secure login/registration system to ensure that only authorized users (e.g., club executives, tournament organizers) have access to the platform. Role-based access control will allow different levels of permissions (e.g., admin, scorekeeper) depending on the user's role in the tournament.

- **CSV Import and Data Table Rendering**:
  The platform will allow users to upload .csv files containing participant data (e.g., rank, dojo affiliation, age). This file will be rendered into a sortable, filterable table on the interface, with options to rename columns and filter participants based on specific criteria. Users will be able to select participants from this table to generate the tournament brackets.

- **Bracket Customization**:
  After brackets are generated, users will have the ability to regenerate new bracket matchups or manually adjust matchups if needed. Once finalized, the brackets can be saved as a PDF for distribution and printed for offline use.

- **Score Input and Management**:
  The dynamic score input interface will allow tournament officials to input scores in real-time, updating the tournament bracket automatically. The system will include safeguards to prevent errors, such as automatically

advancing players when they have won a match and preventing further score inputs once the match is complete.

- **Collaboration and Real-Time Synchronization**:
  The system will support real-time collaboration, ensuring that multiple users can view and update the tournament data simultaneously. All updates will be synchronized instantly across devices, ensuring that everyone involved in the tournament has the latest information.

- **Long-Term Record Keeping**:
  The platform will store all past events and allow users to search, filter, and review historical data. This helps ensure that the system becomes a valuable resource for both tournament organizers and participants to track progress and analyze performance trends.

Timeline

As this project is a **long-term initiative** with only **one developer** (myself), it will take time to reach a fully functional MVP. The timeline below outlines the phases of development, from initial requirement gathering to full integration into the tournament planning workflow. Each phase represents a significant milestone, with opportunities for feedback and testing along the way. While this project will take time to complete, the aim is to ensure that each component is robust and tailored to the real needs of kendo tournament organizers.

The **initial deployment will focus on fulfilling the needs of UTKC**. However, the system is designed with scalability in mind and **could eventually be extended to serve other kendo clubs**. The flexible nature of the platform means that it can be adapted to accommodate different tournament formats, and scoring systems as needed.

September/October 2024

Meetings with Club Executives and Past Tournament Organizers

During this phase, I would like to meet with the club executives and past tournament organizers to gather detailed requirements and identify any additional gaps in the current tournament process. These discussions will inform the final feature set and help ensure the system meets the real-world needs of the kendo community.

December 2024 to February 2025

Completion of the Automated Bracket Generation Feature (Alpha Testing)

The first major milestone will be developing the automated bracket generation feature. This component will be designed to handle a variety of participant factors and generate fair, balanced tournament brackets. By February 2025, the feature should be ready for **alpha testing** during the 2025 UTKC tournament. Feedback from this test phase will be used to refine and optimize the feature.

July to August 2025

Completion of the Dynamic Score Input Interface (Beta Testing)

The second major feature, the dynamic score input interface, will be developed and completed by this time. This feature will enable tournament organizers to input scores in real-time, updating the brackets automatically. During this phase, I plan to **reach out to other kendo clubs** for **beta testing** (upon approval), broadening the scope of the project and ensuring the system can handle various tournament formats and styles.

Early 2026

Full Integration into UTKC Tournament Planning Flow

By early 2026, the system should be fully integrated into the UTKC's tournament planning process. At this stage, the Kendo Tournament Planner should be fully operational, incorporating both automated bracket generation and dynamic score input. The platform will support **real-time collaboration**, have **event history tracking**, and be ready for use in other kendo clubs and tournaments beyond our own (if there is interest).

Contact

For any inquiries, feedback, or collaboration opportunities regarding the project, please feel free to reach out to me:

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I am happy to discuss the project in further detail or answer any questions. Your input will greatly help shape the development and ensure that the tournament planner meets the needs of the kendo community!

Thanks! :)