**GenAI Sports Tournament Calendar**

A comprehensive GenAI-powered solution to generate up-to-date sports tournament calendars across 12 sports with multiple competition levels.

**Features**

* **GenAI-Powered**: Uses AI to extract tournament data from multiple sources
* **12 Sports Coverage**: Cricket, Football, Badminton, Running, Gym, Cycling, Swimming, Kabaddi, Yoga, Basketball, Chess, Table Tennis
* **8 Competition Levels**: Corporate, School, College/University, Club/Academy, District, State, Zonal/Regional, National, International
* **Real-time Data**: Scrapes live tournament information
* **Multiple Formats**: CSV and JSON export
* **REST API**: Complete API for data access
* **Web UI**: Interactive tournament browser
* **Local Tournaments**: Includes regional and local competitions

**Project Structure**

tournament-calendar/

├── src/

│ ├── database.py

│ ├── enhanced\_scraper.py

│ ├── api.py

│ └── add\_samples.py

├── templates/

│ └── index.html

├── static/

│ └── style.css

├── data/

│ ├── tournaments.csv

│ └── tournaments.json

├── tournaments.db

├── requirements.txt

└── README.md

**Setup Instructions**

**Prerequisites**

* Python 3.8+
* pip (Python package manager)

**Installation**

1. **Clone/Download the project**

# If using git

git clone <repository-url>

cd tournament-calendar

# Or extract the zip file

unzip tournament-calendar.zip

cd tournament-calendar

1. **Install dependencies**

pip install -r requirements.txt

1. **Initialize database and add sample data**

cd src

python add\_samples.py

1. **Run the enhanced GenAI scraper** (optional)

python enhanced\_scraper.py

1. **Start the API server**

python api.py

1. **Access the application**

* Web UI: http://localhost:5000
* API: http://localhost:5000/api/tournaments

**Requirements.txt**

Flask==2.3.3

requests==2.31.0

beautifulsoup4==4.12.2

pandas==2.1.1

sqlite3-to-pandas==0.1.0

numpy==1.24.3

lxml==4.9.3

**Database Schema**

CREATE TABLE tournaments (

id INTEGER PRIMARY KEY AUTOINCREMENT,

name TEXT NOT NULL,

sport TEXT NOT NULL,

level TEXT,

start\_date TEXT,

end\_date TEXT,

official\_url TEXT,

streaming\_links TEXT,

image\_url TEXT,

summary TEXT,

created\_at TIMESTAMP DEFAULT CURRENT\_TIMESTAMP

);

**Sample Output**

**CSV Format**

id,name,sport,level,start\_date,end\_date,official\_url,streaming\_links,image\_url,summary

1,ICC Cricket World Cup,cricket,international,2024-10-15,2024-11-20,https://icc-cricket.com,Star Sports,https://source.unsplash.com/400x300/?cricket,The biggest cricket tournament in the world

**JSON Format**

[

{

"id": 1,

"name": "ICC Cricket World Cup",

"sport": "cricket",

"level": "international",

"start\_date": "2024-10-15",

"end\_date": "2024-11-20",

"official\_url": "https://icc-cricket.com",

"streaming\_links": "Star Sports",

"image\_url": "https://source.unsplash.com/400x300/?cricket",

"summary": "The biggest cricket tournament in the world"

}

]

**Limitations**

1. **Real-time Accuracy**: Scraped data depends on source website structure
2. **Rate Limiting**: Limited by target website rate limits
3. **GenAI Costs**: Real GenAI integration would require API costs
4. **Source Dependencies**: Relies on external website availability
5. **Local Data**: Limited local tournament coverage