Putt Putt Project

Project Summary:

We have been tasked with building a tournament management suite and beverage ordering system for a bar that hosts sponsored putt putt tournaments. The application will be web-based, using the Django framework. Key points of functionality include:

- Players are able to register for their tournament, submit scores for each hole, and order drinks as they play.
- DrinkMeisters are able to receive drink orders and the necessary information to deliver them to players.
- Sponsors are able to visit the website and submit a request to sponsor a new tournament.
- Managers are given full control over the system- creating tournaments, managing users, and accepting sponsorships. They also have access to revenue generated from drink orders.

The web application will display scheduled tournaments, a leaderboard for active tournaments, and a login system to access specific user dashboards.

Team Organization:

Project Manager: Ethan Payne

Designers & Developers: David Rasmussen, Justin Reid, Jonathan Crandall, Ethan Payne

Software Development Process:

The development will be broken up into five phases. Each phase will be a little like a Sprint in an Agile method and a little like an iteration in a Spiral process. Specifically, each phase will be like a Sprint, in that work to be done will be organized into small tasks, placed into a “backlog”, and prioritized. Then, using on time-box scheduling, the team will decide which tasks the phase (Sprint) will address. The team will use a Scrum Board to keep track of tasks in the backlog, those that will be part of the current Sprint, those in progress, and those that are done.

Each phase will also be a little like an iteration in a Spiral process, in that each phase will include some risk analysis and that any development activity (requirements capture, analysis, design, implementation, etc.) can be done during any phase. Early phases will focus on understanding (requirements capture and analysis) and subsequent phases will focus on design and implementation. Each phase will include a retrospective.

Phase	**Iteration**
1.	Phase 1 - Requirements Capture
2.	Phase 2 - Analysis, Architectural, UI, and DB Design
3.	Phase 3 - Implementation and Unit Testing
4.	Phase 4 - More Implementation and Testing

We will use Unified Modeling Language (UML) to document user goals, structural concepts, component interactions, and behaviors.

Policies, Procedures, & Tools:

Tri-weekly standup meetings will occur after class sessions. Regular team meetings will take place on days with no scheduled lecture, with after hours ad-hoc meetings scheduled as needed.

Discord - Used for team communication and meetings.

Google Drive - Storing design documents and other files related to the project, but not directly associated with the technical implementation.

GitHub - Project submissions, version control, and the home for anything else related to the technical implementation.

Risk Analysis:

- Tournament System
    - Likelihood - Low
    - Severity - High
    - Consequences - Dissatisfied players, confusion about tournament structure.
    - Work-Around - Manual tournament tracking.

- User Database & Login System
    - Likelihood - Low
    - Severity - Very High
    - Consequences - Users unable to register or interact, impacts functionality of all other systems.
    - Work-Around - None. Entire project cannot function without a proper database & dashboard implementation.

- Drink Menu
    - Likelihood - Low
    - Severity - Med
    - Consequences - Ineffective drink distribution, dissatisfied players.
    - Work-Around - Traditional bar that would require customers to break from their putting to receive their beverages.

- Event Calendar
    - Likelihood - Low
    - Severity - Med
    - Consequences - Confusion among sponsors and players about when tournaments are scheduled to take place.
    - Work-Around - Contacting managers through other communication methods.

- Compatibility
    - Likelihood - Low
    - Severity - Med
    - Consequences - User dissatisfaction, frustration for employees.
    - Work-Around - Using desktop UI on mobile devices.

Configuration Management:

See the README.md in our GitHub repository.