**Team Charter for City of Calgary Dataset Project**

**Mission:**

To develop an innovative, user-friendly web application that integrates the City of Calgary dataset to display community boundaries on an interactive map, providing users with valuable geographic and community data. The project will also optimize API performance, ensure data integrity, and implement automated data backups.

**Scope:**

* **In-Scope:**
  + Frontend development using React.js to display the map and community boundaries.
  + Backend development with Node.js and Express.js for API endpoints.
  + Database integration with MongoDB to store and retrieve dataset information.
  + Implementation of cron jobs for regular data backups and imports.
  + Optimizing performance of API calls and data display.
  + Integration with Google Maps API for the map functionality.
* **Out-of-Scope:**
  + Mobile app development.
  + Real-time data updates (non-dynamic dataset).
  + Deployment to production servers (handled by a separate team).

**Goals:**

1. **User Engagement:** Increase site engagement by 15% through the improved user interface and data visualization.
2. **Performance Optimization:** Improve API response times by 20%.
3. **Data Integrity:** Ensure data backups and imports occur reliably every month.
4. **Map Functionality:** Display accurate community boundaries with Google Maps integration.
5. **Documentation:** Maintain thorough documentation for both development processes and the final product.

**Strengths & Skills:**

* **Technical Skills:**
  + **Frontend:** React.js, HTML, CSS, JavaScript.
  + **Backend:** Node.js, Express.js.
  + **Database:** MongoDB.
  + **Version Control:** Git, GitHub.
  + **API Integration:** Google Maps API, Custom Backend APIs.
* **Soft Skills:**
  + **Collaboration:** Agile development practices, teamwork.
  + **Problem-Solving:** Handling data issues, performance bottlenecks.
  + **Communication:** Clear and concise reporting in team meetings.

**Roles & Responsibilities:**

* **Project Manager (PM):** Oversees the project, tracks progress, and ensures deadlines are met. Communicates with stakeholders and handles any roadblocks.
* **Frontend Developer:** Designs and develops the user interface using React.js, integrates the Google Maps API, and ensures seamless user experience.
* **Backend Developer:** Creates and optimizes RESTful APIs with Node.js and Express.js, manages database schemas in MongoDB, and ensures data integrity.
* **QA Tester:** Ensure that APIs and the user interface meet quality standards and perform as expected.
* **DevOps (if applicable):** Implements and monitors cron jobs for data backups, manages deployment pipelines, and ensures the application is deployed reliably.

**Metrics of Success:**

1. **Engagement Metrics:** Website analytics showing a 15% increase in user engagement within 3 months of launch.
2. **Performance Metrics:** API response times improved by 20%.
3. **Data Integrity Metrics:** Successful monthly data backups with no data loss.
4. **Bug-Free Launch:** Zero critical bugs found at launch.
5. **User Feedback:** Positive feedback from users regarding usability, speed, and accuracy of community boundaries.[Spicy]

**Values:**

* **Collaboration:** Working together, valuing each team member's input and expertise.
* **Integrity:** Delivering a reliable, accurate product that meets the needs of stakeholders.
* **Innovation:** Continuously seeking opportunities to improve the project and implement new ideas.
* **Transparency:** Keeping open lines of communication regarding progress, challenges, and feedback.

**Norms:**

* **Regular Check-ins:** Daily stand-ups for updates and to address blockers.
* **Code Quality:** Emphasize clean, readable code with proper documentation.
* **Respectful Communication:** Clear, respectful communication in all interactions.
* **Responsiveness:** Team members are expected to respond to messages and requests within 24 hours during workdays.
* **Accountability:** Take ownership of individual tasks and timelines.

**FUN:**

* **Team-building activities:** Monthly virtual or in-person social gatherings (e.g., game nights, happy hours).
* **Celebrating Milestones:** Recognizing achievements, such as the completion of key features or successful deployments.
* **Creative Breaks:** Encourage team members to take regular breaks for mental health and creativity, such as a 5-minute brainstorming session for fun ideas.

**Communication Plans & Coordination Tools:**

* **Daily Stand ups:** 15-30 minute video call or chat updates on progress, blockers, and next steps.
* **Weekly Syncs:** A longer weekly meeting for progress reviews, technical discussions, and planning.
* **Slack:** Used for daily communication, instant messaging, and informal discussions.
* **JIRA:** For task management, sprint planning, and tracking project milestones.
* **GitHub:** Code collaboration, version control, and pull request reviews.
* **Confluence JIRA:** For shared documentation, project specs, and meeting notes.