**Agile Breakdown: Sustainable Smart City Assistant**

**Terminology**

* **Sprint:** A fixed period during which specific tasks are completed.
* **Epic:** A large task or module, split into smaller, manageable user stories.
* **Story:** A small unit of work under an epic, completed within a sprint.
* **Story Point:** A numerical value estimating the effort required, typically using Fibonacci numbers (1, 2, 3, 5, 8, etc.).

**Sprint 1 (5 Days)**

**Epic:** Backend API Setup and Model Integration

| **Task** | **Description** | **Story Points** |
| --- | --- | --- |
| API Development | Set up routes like /chat, /tips, /summary | 2 |
| Model Integration | Connect Hugging Face Inference API (e.g., google/gemma-2b-it) | 3 |
| Response Formatting | Format model output for frontend | 2 |
| Basic Testing | Test API and model responses | 2 |

**Total Story Points for Sprint 1:** 9

**Sprint 2 (5 Days)**

**Epic:** Frontend Development and Final Integration

| **Task** | **Description** | **Story Points** |
| --- | --- | --- |
| Streamlit Layout | Design frontend layout and sections | 3 |
| Chat UI | Build interactive chat component | 3 |
| Backend Integration | Connect API to frontend | 5 |
| Final Testing | Conduct testing and debugging | 4 |

**Total Story Points for Sprint 2:** 15

**Velocity Calculation**

* **Total Story Points:** 9 (Sprint 1) + 15 (Sprint 2) = 24
* **Number of Sprints:** 2
* **Velocity = Total Story Points / Number of Sprints**
* **Velocity = 24 / 2 = 12**

**Team Velocity:** 12 Story Points per Sprint