Task Dependecy Network Diagram

The Task Dependency Network Diagram outlines the relationships and dependencies between various tasks (or tickets) in your project. Here's a breakdown of the tasks, dependencies, and critical path:

Tasks:

1. **Ticket 11 (User Story 15):**

   ○ **Task:** Create a feedback box where users can input and save feedback to the database.
   ○ **Dependency:** This task is foundational as it interacts directly with the database.

2. **Ticket 15 (User Story 23):**

   ○ **Task:** Allow deletion of feedback from the database.
   ○ **Dependency:** Requires the database structure set up by Ticket 11 (User Story 15) to handle feedback.

3. **Ticket 12 (User Story 4):**

   ○ **Task:** Add three buttons (Beginner, Intermediate, and Expert) and display sets and reps for the selected exercise.
   ○ **Dependency:** None

4. **Ticket 14 (User Story 17):**

   ○ **Task:** Beginner mode provides extra guidance to make learning exercises easier.
   ○ **Dependency:** Requires Ticket 12 to establish functionality for different exercise levels.

5. **Ticket 13 (Video Recording - Sprint 3):**

   ○ **Task:** Record videos for the project in Sprint 3.
   ○ **Dependency:** Supports but doesn't depend directly on the tasks above.

Dependencies:

- **Ticket 11 → Database:** Ticket 11 interacts with the database to save user feedback.
- **Ticket 15 → Ticket 11:** Ticket 15 depends on Ticket 11 to have the feedback system in place and deletion of it
- **Ticket 12 → None:** Ticket 12 uses stored information of sets n reps from saved variables.
- **Ticket 14 → Ticket 12:** Ticket 14 enhances the features developed in Ticket 12 (beginner mode provides extra guidance to learn exercises more easily).
- **Ticket 13:** While related, it is an independent task supporting other features like video tutorials.

Critical Path:

The **Critical Path** represents the sequence of dependent tasks that determine the minimum time required to complete the project. In this diagram:

1. **Ticket 11 (Create Feedback Box)** → Establish the foundation of the database interaction and saved input of user to database table.
2. **Ticket 15 (Delete Feedback)** → Requires Ticket 11 and builds on it by deleting feedback from database table.
3. **Ticket 12 (Add Buttons)** → Add three buttons (Beginner, Intermediate, and Expert) and display sets and reps for the selected exercise.
4. **Ticket 14 (Beginner Mode)** → Extends the functionality from Ticket 12.

These tasks (Ticket 11 → Ticket 15 → Ticket 12 → Ticket 14) form the critical path because delays in any of these will directly impact the completion of the project.

Summary of the Critical Path:

- **Step 1:** Implement Ticket 11 (Feedback box and database setup).
- **Step 2:** Develop Ticket 15 (Feedback deletion functionality).
- **Step 3:** Add features in Ticket 12 (Buttons for exercise levels).
- **Step 4:** Enhance user guidance in Ticket 14 (Beginner mode).

Ticket 13 (Video Recording) is not on the critical path because it operates somewhat independently and doesn't block other tasks.