**Critical Path Method Analysis**

**Project Tasks:**

1. **Project Initiation and Planning:**

1.1 Define project objectives.

1.2 Plan project schedule.

1.3 Allocate resources.

1. **"Sell It" Module Development:**

2.1 Create User Interface for Adding Listings.

2.2 Implement Mobile Phone Listing Creation.

2.3 Implement Image Upload and Processing.

2.4 Implement Mobile Phone Details Retrieval.

2.5 Implement Listing Management.

1. **"Purchase It" Module Development:**

3.1 Create User Interface for Searching and Purchasing.

3.2 Implement Mobile Phone Search and Filtering.

3.3 Implement Price Prediction Model.

3.4 Implement Seller Verification.

1. **Integration and Testing:**

4.1 Integrate "Sell It" and "Purchase It" Modules.

4.2 Perform Unit Testing.

4.3 Conduct Integration Testing.

1. **Deployment and Launch:**

5.1 Prepare for Production Deployment.

5.2 Deploy the Mobile App to App Stores.

1. **User Testing and Feedback:**

6.1 Launch Beta Version for User Testing.

6.2 Collect User Feedback.

6.3 Make Necessary Revisions.

**Task Dependencies:**

* Task 1 must be completed before proceeding to any development tasks.
* Task 2 and Task 3 are completed after the completion of Task 1.
* Task 4 depends on the completion of development tasks in Task 2 and Task 3.
* Task 5 is dependent on the completion of Task 4.
* Task 6 can start after completion of Task 5.

**Estimated Durations:**

* Task 1: 1 week
* Task 2: 2 weeks
* Task 3: 2 weeks
* Task 4: 2 weeks
* Task 5: 1 week
* Task 6: 1 week