**Vowel Count Program:**

**Actors:**

1. Master –controls execution flow within the actor system
2. Worker –compute on messages received from master
3. Estimator –computes estimation on total vowel count and updates the feedback
4. Listener - Prints result on console

**Main:**  User class – creates

1. Actor System,
2. Listener
3. Estimator
4. Master – creates a RoundRobinPool that configures workers

**Messages:** Below table describes the complete flow of messages among actors showing senders, receivers along with message names and their purpose.

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| --- | --- | --- | --- | --- |
| **S.NO** | **MESSAGE NAME** | **PURPOSE** | **SENDER** | **RECEIVER** |
| 1. | Start | to kickstart | User | master |
| 2. | Greet | to notify actor, display greeting | Master | Listener |
| 3. | FirstFile | to process FirstFile | Listener | Master |
| 4. | File | To send partitioned file | Master | Worker |
| 5. | Count | To tell vowel count | Worker | Master |
| 6. | PredictCount | To predict total vowel count in current file | Master | Estimator |
| 7. | PartialResult | To display partial result | Estimator | Listener |
| 8. | UpdatePrediction | To show updatedResult | Master | Estimator |
| 9. | UpdatePrediction | To display updated result | Estimator | Listener |
| 10. | NextFile | To process subsequent files | Listener | Estimator |
| 11. | NextFile | To notify master to process next files | Estimator | Master |
| 12. | File/End | To process subsequent files/ end the process | Master/Master | Worker/Master |
| 13. | End | To display end of processing | Master | Listener |