**CGrep  
Actor-Based Design**

* **Team**
* Bendrix Bailey
* **Actors**

Specify the design of your actors using as many copies of the following table as necessary.

|  |  |  |  |
| --- | --- | --- | --- |
| **Name:** CollectionActor | | | |
| **State information (What does the actor know?):**   * Knows number of files total, number of files currently read, and system that governs the actors | | | |
| **Responsibilities (What does the actor do?):**   * Prints out the results for each found object sent to it by the ScanActor * Kills all actors when all files/lines are read | | | |
| **Messages Received** | | | |
| **Message class** | **Sender** | **Contents** | **Resulting action or effect** |
| FileCount | CGrep.java | number of files/lines to read | sets total accepted files |
| Found | ScanActor.java | Found object containing matches | Prints out all matches into the console |
| **Messages Sent** | | | |
| **Message class** | **Recipient** | **Contents** | **Purpose and trigger** |
| No messages sent |  |  |  |
| No messages sent |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Name:** ScanActor | | | |
| **State information (What does it know?):**   * Configure object containing filename and wether to read from standard in or a file * Pattern object to match with | | | |
| **Responsibilities (What does it do?):**   * Reads one whole file (or one line) and searches for a pattern * Creates a found object for the line or file, and sends back to CollectionActor | | | |
| **Messages Received** | | | |
| **Message class** | **Sender** | **Contents** | **Impact or effect** |
| Configure | CGrep.java | name of file and who to send it to | Dictates file name to open |
|  |  |  |  |
| **Messages Sent** | | | |
| **Message class** | **Recipient** | **Contents** | **Purpose and trigger** |
| Found | CollectionActor | Found object containing list of matches | Sends to collectionActor to print out results, triggers on end of file or end of line |
|  |  |  |  |

* **Actor Collaboration Diagram**

