```
HeuristicBase
                                                                                                             HeuristicFixed
  + computeCores(coresToBeAllocated: Double.
                                                                                     + computeCores(coresToBeAllocated: Double,
              executorIndex: Int,
                                                                                                executorIndex: Int.
              stageId: Int.
                                                                                                stageId: Int,
              last: Boolean): (Double, Double, Double)
                                                                                                last: Boolean): (Double, Double, Double)
  + computeCoreForExecutors(coresToBeAllocated: Double,
                                                                                     + computeCoreForExecutors(coresToBeAllocated: Double,
                          stageId: Int.
                                                                                                            stageId: Int,
                          last: Boolean): IndexedSeq[Double]
                                                                                                            last: Boolean): IndexedSeq[Double]
  + computeTaskForExecutors(coresToBeAllocated: Double,
                                                                                     + computeDeadlineStage(startTime: Long,
              totalTasksStage: Int,
                                                                                                appDeadlineJobMilliseconds: Long,
              last: Boolean): List[Int]
                                                                                                totalStageRemaining: Long,
  + computeDeadlineStage(startTime: Long,
                                                                                                totalDurationRemaining: Long,
              appDeadlineJobMilliseconds: Long,
                                                                                                stageDuration: Long,
              totalStageRemaining: Long,
                                                                                                stageId: Int,
              totalDurationRemaining: Long,
                                                                                                firstStage : Boolean): Long
              stageDuration: Long,
                                                                                     + computeDeadlineStageWeightGiven(startTime: Long,
              stageId: Int,
                                                                                                appDeadlineJobMilliseconds: Long,
              firstStage : Boolean): Long
                                                                                                weight: Double,
  + computeDeadlineStageWeightGiven(startTime: Long,
                                                                                                stageId: Int,
              appDeadlineJobMilliseconds: Long,
                                                                                                firstStage: Boolean): Long
              weight: Double,
                                                                                     + computeCoreStage(deadlineStage: Long = 0L,
              stageId: Int,
                                                                                                numRecord: Long,
              firstStage: Boolean): Long
                                                                                                stageId: Int,
  + computeCoreStage(deadlineStage: Long = 0L,
                                                                                                firstStage : Boolean,
              numRecord: Long,
                                                                                                lastStage: Boolean): Double
              stageId: Int,
                                                                                     + checkDeadline(appJson: JsValue): Boolean
              firstStage: Boolean,
              lastStage: Boolean): Double
  + omputeNominalRecord(stage: StageInfo,
                                                                                                            HeuristicControl
              duration: Long.
                                                                                     + computeCores(coresToBeAllocated: Double,
              recordsRead: Double): Unit
                                                                                                executorIndex: Int,
  + checkDeadline(appJson: JsValue): Boolean
                                                                                                stageId: Int,
                                                                                                last: Boolean): (Double, Double, Double)
  + nextProfile(
                                                                                     + computeCoreForExecutors(coresToBeAllocated: Double,
              appJJ: JsValue,
                                                                                                            stageId: Int,
              valExFlows: java.util.ArrayList[Integer],
                                                                                                            last: Boolean): IndexedSeq[Double]
              jobId: Int): JsValue
                                                                                     + computeTaskForExecutors(coresToBeAllocated: Double,
                                                                                                totalTasksStage: Int,
                                                                                                last: Boolean): List[Int]
                   HeuristicControlUnlimited
                                                                                     + computeDeadlineStage(startTime: Long,
                                                                                                appDeadlineJobMilliseconds: Long,
  + computeCoreStage(deadlineStage: Long = 0L,
                                                                                                totalStageRemaining: Long,
              numRecord: Long,
                                                                                                totalDurationRemaining: Long,
              stageId: Int,
                                                                                                stageDuration: Long,
              firstStage: Boolean,
                                                                                                stageId: Int,
              lastStage: Boolean): Double
                                                                                                firstStage: Boolean): Long
  + nextProfile(
              appJJ: JsValue,
                                                                                     + computeDeadlineStageWeightGiven(startTime: Long,
              valExFlows: java.util.ArrayList[Integer],
                                                                                                appDeadlineJobMilliseconds: Long,
              jobId: Int): JsValue
                                                                                                weight: Double,
                                                                                                stageId: Int,
                                                                                                firstStage: Boolean): Long
                                                                                     + computeCoreStage(deadlineStage: Long = 0L,
                                                                                                numRecord: Long,
           HeuristicSymExControlUnlimited
                                                                                                stageId: Int,
                                                                                                firstStage: Boolean,
                                                                                                lastStage: Boolean): Double
+ nextProfile(
           appJJ: JsValue,
                                                                                     + checkDeadline(appJson: JsValue): Boolean
           valExFlows: java.util.ArrayList[Integer],
                                                                                     + nextProfile(
           jobId: Int): JsValue
                                                                                                 appJJ: JsValue,
                                                                                                valExFlows: java.util.ArrayList[Integer],
                                                                                                jobId: Int): JsValue
```