

## Judge Package

### JudgeService

-LOGGER : Logger = LogManager.getLogger(JudgeService.class)  
-schedulerThread : Thread  
-judgeThreads : Thread[]  
-judgeQueue : BlockingQueue<JudgeItem>  
-applicationContext : ApplicationContext  
-settings : Settings  
  
+init() : void  
+destroy() : void

### JudgeItem

-status : StatusForJudgeDTO  
-compileInfo : String  
-compileInfoService : CompileInfoService  
-statusService : StatusService  
-userService : UserService  
-problemService : ProblemService  
  
+getStatus() : StatusForJudgeDTO  
+setStatus(status : StatusForJudgeDTO) : void  
+getCompileInfo() : String  
+setCompileInfo(compileInfo : String) : void  
+JudgeItem()  
+getSourceName() : String  
+update(updateStatus : boolean) : void

### Scheduler

-LOGGER : Logger = LogManager.getLogger(Scheduler.class)  
-statusService : StatusService  
-judgeQueue : BlockingQueue<JudgeItem>  
-applicationContext : ApplicationContext  
-INTERVAL : long = 3L  
  
+setJudgeQueue(judgeQueue : BlockingQueue<JudgeItem>) : void  
+run() : void  
+searchForJudge(isFirstTime : boolean) : void  
+setStatusService(statusService : StatusService) : void  
+setApplicationContext(applicationContext : ApplicationContext) : void

### Judge

-LOGGER : Logger = LogManager.getLogger(Judge.class)  
-judgeName : String  
-workPath : String  
-settings : Settings  
-tempPath : String  
-judgeQueue : BlockingQueue<JudgeItem>  
  
+setJudgeName(judgeName : String) : void  
+setWorkPath(workPath : String) : void  
+setTempPath(tempPath : String) : void  
+setJudgeQueue(judgeQueue : BlockingQueue<JudgeItem>) : void  
+run() : void  
+buildJudgeShellCommand(problemId : int, currentTestCase : int, judgeItem : JudgeItem)  
+getCallBackString(shellCommand : String) : String []  
+judge(judgeItem : JudgeItem) : void  
+updateJudgeItem(callBackString : String [], judgeItem : JudgeItem) : boolean