# Event Identification

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Event | Primary Object | Collaborator | Invoked Method |
|  | Register into the system | Authentication | User, Database | Register() |
|  | Validate inputted data | System | User, Contest, Problem | Validate() |
|  | Verify inputted data | System | User, Contest, Problem | Verify() |
|  | Login into the system | Authentication | User | Login() |
|  | Recover account | Authentication |  | Recover() |
|  | Log out from the system | Authentication | System | Logout() |
|  | Set contest | Contest | Problem, Database | CreateNewContest() |
|  | Remove contest | Contest | Database | removeContest() |
|  | Participate in contest | Contest |  | participateInContest() |
|  | Modify contest | Contest | Database | modifyContest() |
|  | Set problem | Problem | Database | addProblem() |
|  | Remove problem | Problem | Database | removeProblem() |
|  | Show problem | Problem | Database | showProblem() |
|  | Submit solution code | Submission | System, Database | submitForJudgement() |
|  | Compile code | System |  | compileCode() |
|  | Run code | System |  | runCode() |
|  | Match output with predefined output file | System | Database | matchWithSolutionFile() |
|  | Give verdict | System | User | giveVerdict() |
|  | Show submission status | ProblemSolver | System | showSubmission() |
|  | Show rank in contest | Contest | System, Database | showRankOfContest() |
|  | Modify profile | User | Database | modifyUserProfile() |
|  |  |  |  |  |