A black and white triangle with a bird and text

Description automatically generated

**Team:** SpaceKO

**Team Members:**

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**Astronaut Class:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Module Name** | **Input Parameters** | **Output** | **Description** | **Team Member** |
| getAstroName() | - | AstroName:  String | This module  gets the “AstroName” member. | Omar Mokhtar |
| setAstroName() | AstroName: String | - | This module  sets the “AstroName” member. | Omar Mokhtar |
| getAstroID() | - | AstroID: int | This module  gets the “AstroName” member. | Omar Mokhtar |
| setAstroID() | AstroID: int | - | This module  sets the “AstroName” member. | Omar Mokhtar |
| getMissionName() | - | missionName: String | This module  gets the “MissionName” member. | Omar Mokhtar |
| setMissionName() | missionName: String | - | This module  sets the “MissionName” member. | Omar Mokhtar |
| getMissionID() | - | missionID: int | This module  gets the “ID” member. | Omar Mokhtar |
| setMissionID() | missionID: int | - | This module  gets the “missionID” member. | Omar Mokhtar |
| addAstronaut() | - | String Output | This module *inserts* a new astronaut into the database using a SQL statement. | KareemEldeen Ahmad |
| fetch() | ID: int | Astronaut Object or NULL | This module attempts to *fetch* an already existing astronaut within the database. | KareemEldeen Ahmad |
| edit() | ID: int | String output | This module attempts to *edit* an already existing astronaut within the database. | KareemEldeen Ahmad |
| delete() | ID: int | String output | This module attempts to *delete* an already existing astronaut within the database. | KareemEldeen Ahmad |

**CrewMember Class:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Module Name** | **Input Parameters** | **Output** | **Description** | **Team Member** |
| getMemberID() | - | memberID: int | This module  gets the “ID” member. | Omar Mokhtar |
| setMemberID() | memberID: int | - | This module  sets the “ID” member. | Omar Mokhtar |
| getMemberName() | - | memberName: String | This module  gets the “memberName” member. | Omar Mokhtar |
| setMemberName() | memberName: String | - | This module sets the “memberName” member. | Omar Mokhtar |
| getMissionID() | - | missionID: int | This module  gets the “missionID” member. | Omar Mokhtar |
| setMissionID() | missionID: int | - | This module sets the “missionID”  member. | Omar Mokhtar |
| getMissionName() | - | missionName: String | This module  gets the “missionName” member. | Omar Mokhtar |
| setMissionName() | missionName: String | - | This module  sets the “missionName” member. | Omar Mokhtar |
| addCrewMember() | - | String Output | This module *inserts* a CrewMember object into the database. | KareemEldeen  Ahmad |
| fetch() | Id: int | CrewMember Object | This module attempts to *fetch* an already existing crew member within the database | KareemEldeen Ahmad |
| edit() | Id: int | String output | This module attempts to *edit* an already existing crew member within the database. | KareemEldeen Ahmad |
| delete() | ID: int | String output | This module attempts to *delete* an already existing crew member within the database. | KareemEldeen Ahmad |

**Researcher Class:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Module Name** | **Input Parameters** | **Output** | **Description** | **Team Member** |
| getName() | **-** | Name: String | This module  gets the “Name” member. | Omar Mokhtar |
| setName() | Name: String | - | This module  sets the “Name” member. | Omar Mokhtar |
| getResearcherID() | - | researcherID: int | This module  gets the “ResearcherID” member. | Omar Mokhtar |
| setResearcherID() | researcherID: int | - | This module  sets the “ResearcherID” member. | Omar Mokhtar |
| add() | - | String Output | This module *inserts* a Researcher object into the database. | KareemEldeen  Ahmad |
| fetch() | Id: int | Researcher Object | This module attempts to *fetch* an already existing researcher within the database | KareemEldeen Ahmad |
| edit() | Id: int | String output | This module attempts to *edit* an already existing researcher within the database. | KareemEldeen Ahmad |
| delete() | ID: int | String output | This module attempts to *delete* an already existing researcher within the database. | KareemEldeen Ahmad |

**Researchs Class:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Module Name** | **Input Parameters** | **Output** | **Description** | **Team Member** |
| getResearchID() | - | ResearchID: int | This module gets the “ResearchID” member. | Omar Mokhtar |
| setResearchID() | ResearchID: int | - | This module sets the “ResearchID” member. | Omar Mokhtar |
| getResearchName() | - | ResearchName: String | This module gets the  “ResearchName” member. | Omar Mokhtar |
| setResearchName() | ResearchName: String | - | This module gets the “ResearchID” member. | Omar Mokhtar |
| getResearcherID() | - | researcherID: int | This module  gets the “ResearcherID” member. | Omar Mokhtar |
| setResearcherID() | researcherID: int | - | This module  sets the “ResearcherID” member. | Omar Mokhtar |
| getName() | **-** | Name: String | This module  gets the “Name” member. | Omar Mokhtar |
| setName() | Name: String | - | This module  sets the “Name” member. | Omar Mokhtar |
| add() | - | String Output | This module *inserts* a Research object into the database. | Omar Mokhtar |
| fetch() | Id: int | Research Object | This module attempts to *fetch* an already existing research within the database | Omar Mokhtar |
| edit() | Id: int | String output | This module attempts to *edit* an already existing research within the database. | Omar Mokhtar |
| delete() | ID: int | String output | This module attempts to *delete* an already existing research within the database. | Omar Mokhtar |

**GPSData Class:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Module Name** | **Input Parameters** | **Output** | **Description** | **Team Member** |
| setDestinationName() | DestinationName: String | - | This module sets the “DestinationName” member. | Karim Osama |
| getDestinationName() | - | DestinationName: String | This module sets the “DestinationName” member. | Karim  Osama |
| setX\_axis() | x\_axis: float | - | This module sets the “x\_axis” member. | Karim  Osama |
| setY\_axis() | y\_axis: float | - | This module sets the “y\_axis” member. | Karim Osama |
| getX\_axis() | - | x\_axis: float | This module gets the “y\_axis” member. | Karim  Osama |
| getY\_axis() | - | y\_axis:float | This module gets the “y\_axis” member. | Karim  Osama |

**Rocket Class:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Module Name** | **Input Parameters** | **Output** | **Description** | **Team Member** |
| setRocketID() | ID: int | - | This module sets the “RocketID” member. | Karim Osama |
| getRocketID() | - | ID: int | This module gets the “RocketID” member. | Karim Osama |
| setModel() | Model: String | - | This module sets the “Model” member. | Karim Osama |
| getModel() | - | Model: String | This module gets the “Model” member. | Karim Osama |
| setAvailability() | Availability: Boolean | - | This module sets the “Availability” member. | Karim Osama |
| isAvailability() | - | Availability: Boolean | This module gets the “Availability” member. | Karim Osama |
| setVisualCommunication() | VisualCommunication: Boolean | - | This module sets the “Visual  Communication” member. | Karim Osama |
| setVisualCommunication() | - | VisualCommunication: Boolean | This module gets the “Visual  Communication” member. | Karim Osama |
| add() | - | String Output | This module *inserts* a Rocket object into the database. | Karim Osama |
| fetch() | Id: int | Rocket Object | This module attempts to *fetch* an already existing rocket within the database | Karim Osama |
| edit() | Id: int | String output | This module attempts to *edit* an already existing Rocket within the database. | Karim Osama |
| delete() | ID: int | String output | This module attempts to *delete* an already existing Rocket within the database. | Karim Osama |

**Satellite Class:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Module Name** | **Input Parameters** | **Output** | **Description** | **Team Member** |
| setID() | ID: int | - | This module sets the “ID” member. | Karim Osama |
| getID() | - | ID: int | This module gets the “ID” member. | Karim Osama |
| setSatName() | satName: String | - | This module sets the “SatName” member. | Karim Osama |
| getSetName() | - | satName: String | This module gets the “SatName” member. | Karim Osama |
| setGPSdata() | GpsData: String | - | This module sets the “GPSData” member. | Karim Osama |
| getGPSdata() | - | GpsData: String | This module gets the “GPSData” membe. | Karim Osama |
| add() | - | String Output | This module *inserts* a Satellite object into the database. | Karim Osama |
| fetch() | Id: int | Rocket Object | This module attempts to *fetch* an already existing Satellite within the database | Karim Osama |
| edit() | Id: int | String output | This module attempts to *edit* an already existing Satellite within the database. | Karim Osama |
| delete() | ID: int | String output | This module attempts to *delete* an already existing Satellite within the database. | Karim Osama |

**User Class:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Module Name** | **Input Parameters** | **Output** | **Description** | **Team Member** |
| setUsername() | Username: String | - | This module sets the “Username”  Member. | Karim Osama |
| getUsername() | - | Username: String | This module gets the “Username”  Member. | Karim Osama |
| setfullName() | fullName: String | - | This module sets the “fullName”  Member. | Karim Osama |
| getfullName() | - | fullName: String | This module sets the “fullName”  Member. | Karim Osama |
| setPassword() | Password: String | - | This module sets the “Password”  Member. | Karim Osama |
| getPassword() | - | Password: String | This module sets the “Password”  Member. | Karim Osama |
| checkUser() | - | Result: Boolean | This module checks if the “User” object exists within the database. | Karim Osama |
| addUser() | - | String Object | This module *adds* a “User” object into the database if possible | Karim Osama |
| fetchUser() | ID: int | String Object or NULL | This module attempts to *fetch* a “User” object within the database. | Karim Osama |
| editUser() | ID: int | String Object | This module attempts to *edit* an already existing User within the database. | Karim Osama |
| deleteUser() | ID: int | String Object | This module attempts to delete an already existing User within the database. | Karim Osama |

**Report Class:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Module Name** | **Input Parameters** | **Output** | **Description** | **Team Member** |
| getMissionID() | - | missionID: int | This module  gets the “MissionID” member. | Karim Osama |
| setMissionID() | missionID: int | - | This module  gets the “missionID” member. | Karim Osama |
| setReportNumber() | ReportNumber: int | - | This module sets the “ReportNumber”  Member. | Karim Osama |
| getReportNumber() | - | ReportNumber: int | This module gets the “ReportNumber”  Member. | Karim Osama |
| setTitle() | Title: String | - | This module sets the “Title” member. | Karim Osama |
| getTitle() | - | Title: String | This module gets the “Title” member. | Karim Osama |
| setAuthor() | Author: String | - | This module sets the “Author” member. | Karim Osama |
| getAuthor() | - | Author: String | This module gets the “Author” member. | Karim Osama |
| setContent() | Content: String | - | This module sets the “Content” member. | Karim Osama |
| getAuthor() | - | Content: String | This module gets the “Content” member. | Karim Osama |
| addReport() | - | String Object | This module adds a “Report” object into the database. | Karim Osama |

**Project Class:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Module Name** | **Input Parameters** | **Output** | **Description** | **Team Member** |
| setProjectNumber() | ProjectNumber: int | - | This module sets the “ProjectNumber” member. | Omar Mokhtar |
| getProjectNumber() | - | ProjectNumber: int | This module gets the “ProjectNumber” member. | Omar Mokhtar |
| setProjectName() | ProjectName: String | - | This module sets the “ProjectName” member. | Omar Mokhtar |
| getProjectName() | - | ProjectName: String | This module gets the “ProjectName” member. | Omar Mokhtar |
| setTarget() | Target: String | - | This module sets the “Target” member. | Omar Mokhtar |
| getTarget() | - | Target: String | This module gets the “Target” member. | Omar Mokhtar |
| setBudget() | Budget: Float | - | This module sets the “Budget” member. | Omar Mokhtar |
| getBudget() | - | Budget: Float | This module gets the “Budget” member. | Omar Mokhtar |
| addProject() | - | String Object | This module adds a “Project” object into the database. | Omar Mokhtar |
| fetchProject() | ID: int | Project Object or NULL | This module attempts to fetch a “Project” object within the database. | Omar Mokhtar |
| edit() | ID: int | String output | This module attempts to *edit* an already existing project within the database. | Omar Mokhtar |
| delete() | ID: int | String output | This module attempts to *delete* an already existing project within the database. | Omar Mokhtar |

**Mission Class:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Module Name** | **Input Parameters** | **Output** | **Description** | **Team Member** |
| getMissionName() | - | missionName: String | This module  gets the “MissionName” member. | Omar Mokhtar |
| setMissionName() | missionName: String | - | This module  sets the “MissionName” member. | Omar Mokhtar |
| getMissionID() | - | missionID: int | This module  gets the “missionID” member. | Omar Mokhtar |
| setMissionID() | missionID: int | - | This module  sets the “missionID” member. | Omar Mokhtar |
| getMissionID() | - | missionID: int | This module  gets the “missionID” member. | Omar Mokhtar |
| setMissionProgress() | missionProgress: int | - | This module sets the “missionProgress” member. | Karim Osama |
| getMissionProgress() | - | missionProgress: int | This module gets the “missionProgress” member. | Karim Osama |
| setBudget() | Budget: int | - | This module sets the “Budget” member. | Karim Osama |
| getBudget() | - | Budget: int | This module gets the “Budget” member. | Karim Osama |
| setleaderID() | ID: int | - | This module sets the “leaderID” member. | Karim Osama |
| getleaderID() | - | ID: int | This module gets the “leaderID” member. | Karim Osama |
| setReportContent() | ReportContent: String | - | This module sets the “ReportContent” member. | Karim Osama |
| getReportContent() | - | ReportContent: String | This module gets the “ReportContent” member. | Karim Osama |
| addMission() | - | String Output | This module *inserts* a Mission object into the database. | KareemEldeen  Ahmad |
| fetch() | Id: int | Mission Object or NULL | This module attempts to *fetch* an already existing researcher within the database | KareemEldeen Ahmad |
| edit() | Id: int | String output | This module attempts to *edit* an already existing project within the database. | KareemEldeen Ahmad |
| delete() | ID: int | String output | This module attempts to *delete* an already existing project within the database. | KareemEldeen Ahmad |

**DbConnection Class:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Module Name** | **Input Parameters** | **Output** | **Description** | **Team Member** |
| seturl() | - | - | This module tells the driver the URL of the database server on our machine. | KareemEldeen Ahmad |
| setConnection() | - | - | This module attempts to login to the database server using a username and a password. | KareemEldeen Ahmad |
| executeQuery() | StmtQuery: String | Boolean Result | This module attempts to execute a SQL statement on the server. | KareemEldeen Ahmad |
| executeFetchQuery() | StmtQuery: String | ResultSet Object | This module attempts to fetch a result from the executed SQL statement. | KareemEldeen Ahmad |

**loginScreen Class:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Module Name** | **Input Parameters** | **Output** | **Description** | **Team Member** |
| Initialize() | Url: URL object, rb: ResourceBundle object | String Object | Displays a test on the console when the window pops up for the first time. | KareemEldeen Ahmad |
| loginAction() | - | GUI Window or String object | Opens up a GUI window from main.fxml | KareemEldeen Ahmad |

**Main Class:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Module Name** | **Input Parameters** | **Output** | **Description** | **Team Member** |
| Initialize() | Url: URL object, rb: ResourceBundle object | String Object | Displays a test on the console when the window pops up for the first time. | KareemEldeen Ahmad |
| createStage() | fxmlName: String, title: String | Stage (GUI Window) | Displays a GUI window based on an FXML file with a title. | KareemEldeen Ahmad |
| showEditUser() | - | Stage (GUI Window) | Displays the “EditUser.fxml” window. | KareemEldeen Ahmad |
| showMissionsPersonnel() | - | Stage (GUI Window) | Displays the “MissionsPersonnel.fxml” window. | KareemEldeen Ahmad |
| showInterships() | - | Stage (GUI Window) | Displays the “Interships.fxml” window. | KareemEldeen Ahmad |
| showResearches() | - | Stage (GUI Window) | Displays the “Research.fxml” window. | KareemEldeen Ahmad |
| showMissions() | - | Stage (GUI Window) | Displays the “Missions.fxml” window. | KareemEldeen Ahmad |

* **EditUser Class: done by Omar Mokhtar**
* **LaunchVehicles Class: done by Omar Mokhtar**
* **Projects Class: done by Karim Osama**
* **Report Class: done by Karim Osama**

**The rest of the GUI classes are done by KareemEldeen Ahmad.**