Sec 2 - Team #4 | Team Email: [dboules@aucegypt.edu](mailto:dboules@aucegypt.edu)

### Members’ Info

| **Member Name** | **ID** | **Email** |
| --- | --- | --- |
| David Boules | 900231172 | dboules@acuegypt.edu |
| Hazem Ajlan | 900194136 | hazemdiaa@aucegypt.edu |
| Zeiad Mohamed | 900221408 | zeiad\_S@aucegypt.edu |
| Ali Gawad | 900222298 | alisherif04@aucegypt.edu |

GitHub Link: <https://github.com/david-boules/Music-Playlist-Manager>

### Main Classes

| **Class Name** | **Member Variables** | **Member Functions** |
| --- | --- | --- |
| **MainWindow** - allows admin/user to login to the system | Username, Password (taken from line edits) | *(‘validateCredentials’ is taken from ‘User’ and ‘Admin’ classes in this window when appropriate)* |
| **User** - class for a regular user, has their own dashboard | Username, Password | validateCredentials, createPlaylist, searchSongs, viewPlaylist, getLastPlayedSong, getAllPlaylists, back\_button |
| **Admin** - class for the admin account who manages user data | admin\_username, admin\_password | validateLogin, editAdminCredentials, clearLineEdits, back\_button |
| **Playlist** - data type for playlists to be created | name, songs (vector), num\_songs, duration | addSong, deleteSong, play, renamePlaylist, |
| **Song** - data type for songs to be created | title, artist, album, duration | play, isinPlaylist() |
| **PlaylistManager** - page where playlists can be modified | playlists | displayPlaylists, searchPlaylist, searchSong, renamePlaylist, back\_button |
| **PlaylistCreator** - page where playlists can be created | playlist\_name, *(also refers to ‘playlists’ in PlaylistManager)* | createPlaylist, validatePlaylist, back\_button |
| **SongCreator** - page for adding songs to the library | title, artist, album, duration | checkDuplicates, listSongs, back\_button |

### Selected Data Structures

| **List Name** | **Selected DS** | **Reasons for selecting this DS** |
| --- | --- | --- |
| usernames\_and\_passwords | Map | Match each username to their password for easy lookup during login validation |
| songs\_played | Stack | Allows retrieval of last played song |
| song\_library | Vector | Store all the created songs |