Album Management System

You are requested to develop **Album Management System**. The System keeps information about an artist and his/her albums.

Information About Artist:

- artistId: unique id of the artist(auto generated with prefix art-)
- name: Full name of artist
- gender: Gender of artist
- phone: Phone of Artist
- email: Email of Artist

Information About Album:

- albumId: unique Id of album(auto generated integer with prefix alb-)
- artistId: Id of artist(references id in artist information)
- title: Title of publication or album name
- format: Format of recording cd, ..,
- date: date published
- Path: The path where the album is located

Requirement

- The system must allow the user to add artist
- The system should allow the user to edit artist
- The system should allow the user to view artist info
  - View All
  - View by search(Search is prefix search)

- The system should allow the user to add album for an artist
- The system should allow the user to edit album information
- The system should allow the user to remove albums of artist

The break down and interface definition is already done for you (look below)

Important

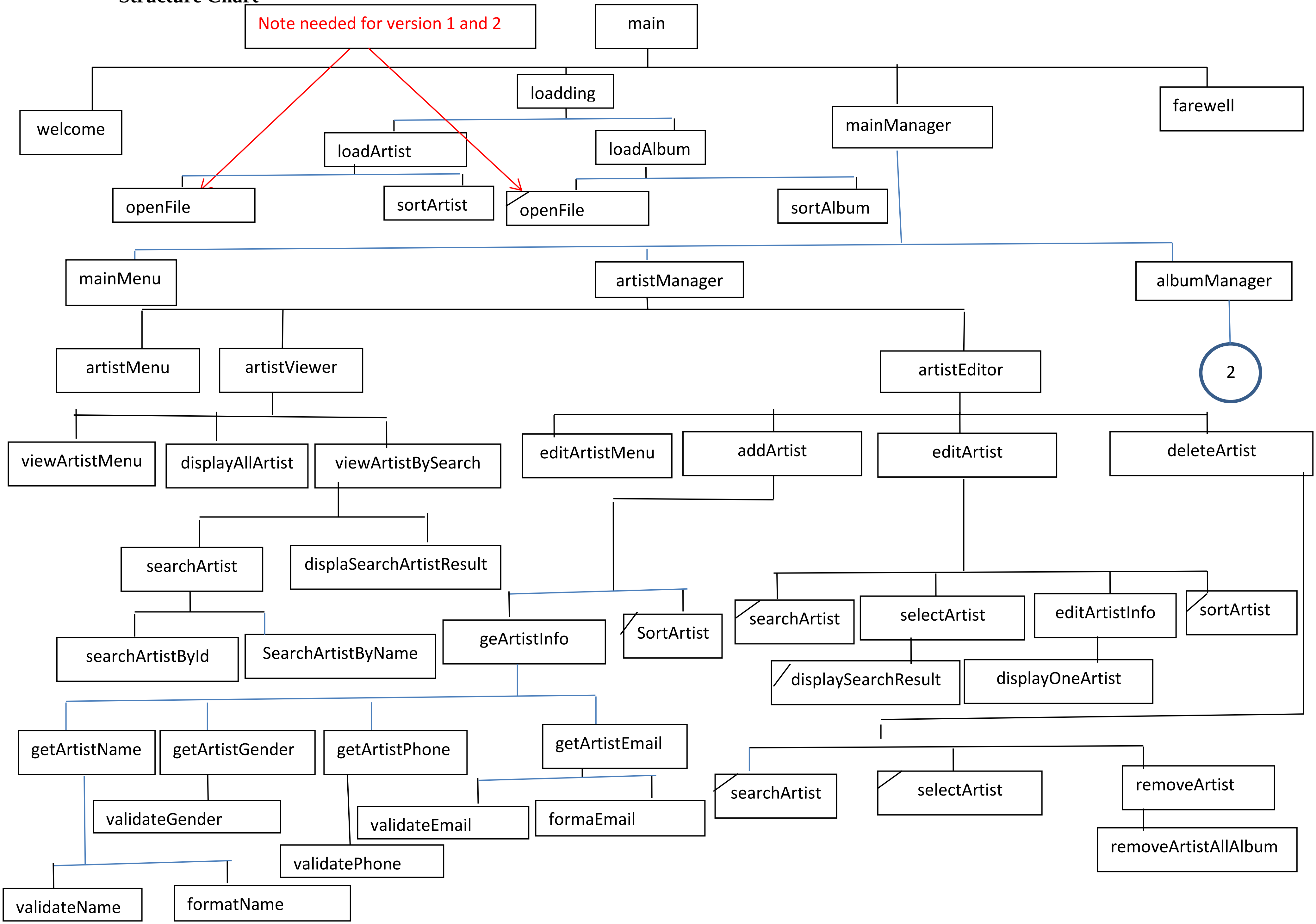
- The assignment is to be done with a group of three students
- Submission will be done in three versions
  - Version 1(with no dynamic memory and file)

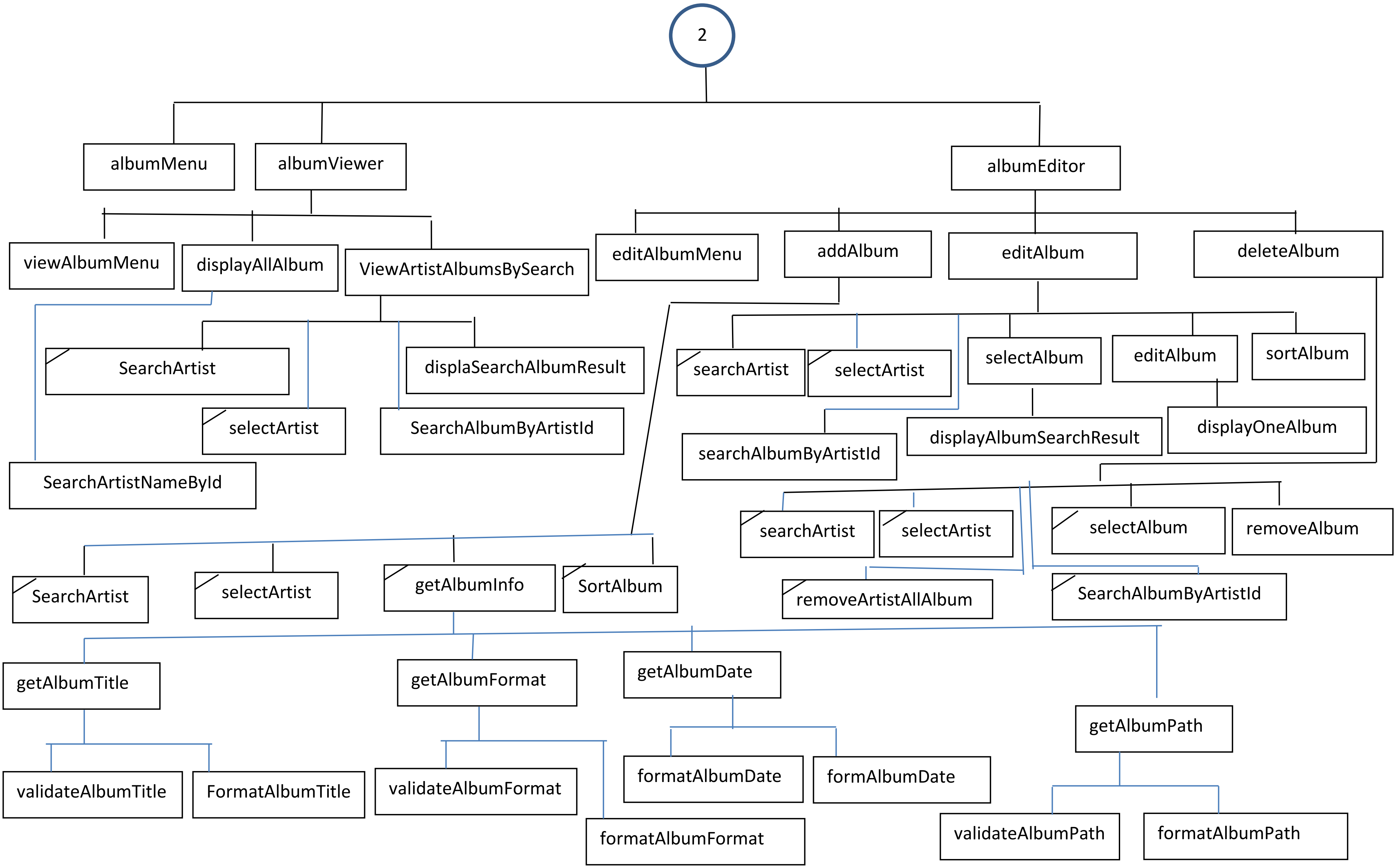
    Submission Date: After two week
  - Version 2(with dynamic memory)

    Submission Date: To be announced
  - Version 3(with file)

    Submission Date: To be announced
- Defense dates: To be announced
- Deadline must be respected
- Project must be done according to the specification
- Each group should submit its own work. Duplicate work receive no credit
- Each member must participate actively

Structure Chart




2
albumMenu
albumViewer
albumEditor
viewAlbumMenu
displayAllAlbum
ViewArtistAlbumsBySearch
editAlbumMenu
addAlbum
editAlbum
deleteAlbum
SearchArtist
displaSearchAlbumResult
selectArtist
SearchAlbumByArtistId
SearchArtistNameById
searchArtist
selectArtist
selectAlbum
editAlbum
sortAlbum
searchAlbumByArtistId
displayAlbumSearchResult
displayOneAlbum
searchArtist
selectArtist
selectAlbum
removeAlbum
removeArtistAllAlbum
SearchAlbumByArtistId
SearchArtist
selectArtist
getAlbumInfo
SortAlbum
getAlbumTitle
getAlbumFormat
getAlbumDate
getAlbumPath
validateAlbumTitle
FormatAlbumTitle
validateAlbumFormat
formatAlbumFormat
formatAlbumDate
formAlbumDate
validateAlbumPath
formatAlbumPath

Data Structure

For Artist

Two dimensional character array to stores artist id(array of c-style string):	artistIds[1000][8]
A character array to store the gender(c-style string):	genders[1000]
Two dimensional character array to stores artist names(array of c-style string):	names[1000][40]
Two Dimensional character array to store phones(array of c-style string):	phones[1000][11]
Two Dimensional character array to store emails(array of c-style string)::	emails[1000][60]

For Album

Two dimensional character array to stores artist id reference(array of c-style string):	artistIdRefs[1000][8]
Two dimensional character array to album ids(array of c-style string):	albumIds[1000][10]
Two dimensional character array to stores Titles(array of c-style string):	titles[1000][80]
Two Dimensional character array to store formats(array of c-style string):	recordFormats[1000][12]
Two Dimensional character array to store published dates(array of c-style string):	datePublisheds[1000][11]
Two Dimensional character array to store album paths(array of c-style string):	paths[1000][100]

Global data

- lastArtistId(int) is the last added artist id(the largest)
- lastAlbumId(int) is the last added album id(the largest)

Module description and interface definition

1. main

The main function

int main()

Parameters

- No parameter

Return

2. **welcome()**

Displays a welcome message to the user

void welcome()

Parameters

- No parameter

Return

- No return

3. **loading**

Populate the artist and album arrays. ***For version one the loading will be done from a fixed array***

void loading(char artistIds[][8], char names[][40], char genders[], char phones[][11], char emails[][80], char artistIdRefs[][8], char albumIds[][8], char titles[][80], char recordFormats[][20], char datePublished[][11], char paths[][100],int & nArtist, int & nAlbum)

Parameters

- artistIds, names, genders, phones, emails are arrays that is to be loaded with artist information from globally declared arrays
- artistIdRefs, char albumIds, titles, recordFormat, datePublished, paths are arrays to be loaded with album information from globally declared arrays
- nArtist is the total number of artist records(to be set in this function)
- nAlbum is the total number of album records(to be set in this function)

Return

- The function doesn’t return.

4. **openFile(**Not needed for this version)

Open the artist and album file.

bool openFile(fstream & fstrm)

Parameters

- fstrm: a file stream to be associated with opened file(fstream type)

Return

- The function returns a status representing whether or not the file opening is successful

5. **loadArtist**

Populate the artist arrays. ***For version one the loading will be done from a fixed array***

void loading(char artistIds[][8], char names[][40], char genders[], char phones[][11], char emails[][80], int & nArtist)

Parameters

- artistIds, names, genders, phones, emails are arrays that is to be loaded with artist information
- nArtist is the total number of artist records loaded

Return

- The function doesn’t return.

6. **loadArtist**

Populate the album arrays. ***For version one the loading will be done from a fixed array***

void loading(char artistIdRefs[][8], char albumIds[][8], char titles[][80], char recordFormats[][20], char datePublished[][11], char paths[][100], int & nAlbum)

Parameters

- artistIdRefs, char albumIds, titles, recordFormat, datePublished, paths are arrays to be loaded with album information
- nAlbum is the total number of album records loaded

Return

- The function doesn’t return.

7. **sortArtist**

Sorts the artist information array by name.

void sort(char artistIds[][8], char names[][40], char genders[], char phones[][11], char emails[][80], int nArtist)

Parameters

- artistIds, names, genders, phones, emails are arrays that contains the artist information in an array
- nArtist is the number of artist information currently existing in the arrays

Return

- The function returns nothing

8. **sortAlbum**

Sorts the album information array by artistIdsRefs

void sort(char artistIdRefs[][8], char albumIds[][8], char titles[][80], char recordFormats[][20], char datePublished[][11], char paths[][100], int nAlbum)

Parameters

- artistIdRefs, char albumIds, titles, recordFormat, datePublished, paths are arrays to be loaded with album information
- nAlbum is the number of albums information currently existing in the arrays

Return

- The function returns nothing

9. **mainHandler**

Handles the main menu choice

void main**(char artistIds[][8], char names[][40], genders[], char phones[][11], char emails[][80], char artistIdsRefs[][8], char albumIds[][8], char titles[][80], char recordFormats[][20], char datePublished[][11], char paths[][100], int & nArtist, int & nAlbum)**

Parameters

- artistIds, names, genders, phones, emails are arrays that contains the artist information in an array
- nArtist is the number of artist information currently existing in the arrays
- artistIdRefs, char albumIds, titles, recordFormat, datePublished, paths are arrays to be loaded with album information
- nAlbum is the number of albums information currently existing in the arrays

Return

- The function returns nothing

10. mainMenu

Displays the main menu: (Manage Artist, Manage Album, Exit) and allow the user to choose and returns the user choice

int mainMenu()

Parameter

- No parameters

Return

- The function returns an integer value representing the user selection

11. artistManager

Manages artist information

bool artistManager(char artistIds[][8], char names[][40], genders[], char phones[][11], char emails[][80], char artistIdsRefs[][8], char albumIds[][8], char titles[][80], char recordFormats[][20], char datePublished[][11], char paths[][100], int & nArtist, int & nAlbum)

Parameters

- artistIds, names, genders, phones, emails are arrays that contains the artist information in an array
- nArtist is the number of artist information currently existing in the arrays
- artistIdRefs, char albumIds, titles, recordFormat, datePublished, paths are arrays to be loaded with album information
- nAlbum is the number of albums information currently existing in the arrays

Return

- The function returns a bool value representing whether the user chooses exit or not

12. ArtistMenu

Displays the artist menu: (View Artist, Edit Artist, Back To Main Menu, Exit) and allow the user to choose and returns the user choice

int artistMenu()

Parameter

- No parameters

Return

- The function returns an integer value representing the user selection

13. artistViewer

Handles the view artist choice

bool artistViewer(const char artistIds[][8], const char names[][40], const char genders[], const char phones[][11], const char emails[][80], int nArtist)

Parameters

- artistIds, names, genders, phones, emails are arrays that contains the artist information in an array
- nArtist is the number of artist information currently existing in the arrays

Return

- The function returns a bool value representing whether the user chooses exit or not

14. viewArtistMenu

Displays the views menu: (Display All Artist, View Artist By Search, Back To Main Menu, Exit), and allow the user to choose and returns the user choice

int viewArtistMenu()

Parameters

- No parameters

Return

- The function returns an integer value representing the user selection

15. displayAllArtist

Displays all artist with their detail

void displayAllArtist(const char artistIds[][8], const names[][40], const genders[], const char phones[][11], const char emails[][80], int nArtist)

Parameters

- artistIds, names, genders, phones, emails are arrays that contains the artist information in an array
- nArtist is the number of artist information currently existing in the arrays

Return

- The function returns nothing

16. viewArtistBySearch

Allow the user to see artists by search

void viewArtistBySearch(const char artistIds[][8], const names[][40], const genders[], const char phones[][11], const char emails[][80], int nArtist)

Parameters

- artistIds, names, genders, phones, emails are arrays that contains the artist information in an array
- nArtist is the number of artist information currently existing in the arrays

Return

- The function returns nothing

17. searchArtist

Searches Artist by name or id .The search is prefix search (start with). Returns the result through the result array which contains the index positions   If target starts with digit search will be by id otherwise by name

void searchArtist(const char artistIds[][8], const names[][40], int nArtist, int result[], int * noResult)

Parameters

- artistIds, names are arrays that contains the artist information in an array
- nArtist is the number of artist information currently existing in the arrays
- result is an array that is going to contain the index position of the matching records
- noResult is the number of matching record

Return

- The function returns nothing

18. searchArtistById

Searches artist by id .The search is prefix search (start with)

void searchArtistById(const char artistIds[][8], int nArtist, const char targetId[], int result[], int * noResult)

Parameters

- artistIds, is an array that contains the artist id in an array
- nArtist is the number of artist information currently existing in the arrays
- result is an array that is going to contain the index position of the matching records
- target is the target id to be searched
- noResult is the number of matching record

Return

- The function returns nothing

19. searchArtistByName

Searches artist by id .The search is prefix search (start with)

void searchArtistByName(const names[][40], int nArtist, const char targetName[], int result[], int * noResult)

Parameters

- names, is arrays that contains the artist names information in an array

- nArtist is the number of artist information currently existing in the arrays
- result is an array that is going to contain the index position of the matching records
- targetName is the target name to be searched
- noResult is the number of matching record

Return

- The function returns nothing

20. displaySearchResult

Displays search result

void displaySearchResult(const char artistIds[][8], const names[][40], const genders[], const char phones[][11], const char emails[][80], int nArtist, const int result[], int noResult)

Parameters

- artistIds, names, genders, phones, emails are arrays that contains the artist information in an array
- nArtist is the number of artist information currently existing in the arrays
- result is the search result array
- noResult is the number of matching record

Return

- The function returns nothing

21. artistEditor

Handles the edit artist choice. Allow the user to add, edit or remove artist

bool artistEditor(char artistIds[][8], char names[][40], char genders[], char phones[][11], char emails[][80], char artistIdsRefs[][8], char albumIds[][8], char titles[][80], char recordFormats[][20], char datePublished[][11], char paths[][100], int & nArtist, int & nAlbum)

Parameters

- artistIds, names, genders, phones, emails are arrays that contains the artist information in an array

- nArtist is the number of artist information currently existing in the arrays
- artistIdRefs, char albumIds, titles, recordFormat, datePublished, paths are arrays to be loaded with album information
- nAlbum is the number of albums information currently existing in the arrays

Return

- The function returns a bool value representing whether the user chooses exit or not

22. editArtistMenu

Displays the edit artist menu: (Edit Artist, Delete Artist, Back To Main Menu, Exit), and allow the user to choose and returns the user choice

int viewArtistMenu()

Parameters

- No parameters

Return

- The function returns an integer value representing the user selection

23. addArtist

Add artist and return status

bool addArtist(char artistIds[][8], char names[][40], char genders[], char phones[][11], char emails[][80], int & nArtist)

Parameters

- artistIds, names, genders, phones, emails are arrays that contains the artist information in an array
- nArtist is the number of artist information currently existing in the arrays

Return

- The function returns bool representing success or failure

24. getArtistInfo

This gets artist info from user

void getArtistInfo (char name[], char & gender, char phones[], char emails[])

Parameters

- name, gender, phone, email are variables to hold artist info

Return

- The function returns nothing

25. getArtistName

This gets artist name from user

void getArtistName (char name[])

Parameters

- name, is artist full name

Return

- The function returns nothing

26. getArtistGender

This gets artist gender from user

char getArtistGender ()

Parameters

- No parameter

Return

- The function returns char representing the artist gender

27. getArtistPhone

This gets artist phone from user

void getArtistPhone (char phone[])

Parameters

- phone, is artist phone

Return

- The function returns nothing

28. getArtistEmail

This gets artist email from user

void getArtistEmail (char email[])

Parameters

- email, is artist email

Return

- The function returns nothing

29. validateName

This validates artist name

bool validateName (const char name[])

Parameters

- name, is artist full name

Return

- The function returns true if the name is valid otherwise returns false

30. FormatName

This formats artist name

void formatName (char name[])

Parameters

- name, is artist full name

Return

- No return

31. validateGender

This validates artist gender

bool validateGender(char gender)

Parameters

- gender, is artist gender

Return

- The function returns true if the gender is valid otherwise returns false

32. validatePhone

This validates artist phone

bool validatePkone (const char phone[])

Parameters

- phone, is artist phone

Return

- The function returns true if the phone is valid otherwise returns false

33. validateEmail

This validates artist email

bool validateEmail (const char email[])

Parameters

- email, is artist email

Return

- The function returns true if the name is valid otherwise returns false

34. FormatEmail

This formats artist email

void formatEmail (char email[])

Parameters

- email, is artist email

Return

- No return

35. editArtist

allow the user to edit artist(handles edit artist menu item choice)

void editArtist(const char artistIds[][8], char names[][40], char genders[], char phones[][11], char emails[][80], int nArtist)

Parameters

- artistIds, names, genders, phones, emails are arrays that contains the artist information in an array
- nArtist is the number of artist information currently existing in the arrays

Return

- No return value

36. selectArtist

Display the search result and allow the user to select the artist to edit. And returns the selected artist

int selectArtist(const char artistIds[][8], const char names[][40], const int result[], int noResult. int forWhat)

Parameters

- artistIds, names, genders, phones, emails are arrays that contains the artist information in an array
- result is search result array containing the index of the matching artist
- noResuit is the number of matching artist in result array
- forWhat 0 for view,1 for edit 2, for delete

Return

- Returns the selected artist position

37. editArtistInfo

Allow the user to edit field by field until the user is done. Returns status(changed or not)

bool editArtistInfo(const char artistId, char name[], char gender, char phone[],char email[])

Parameters

- name, phone, email are strings and gender is a char that contains the artist information to be edited

Return

- Returns true if the record is changed otherwise false

38. displayOneArtist

Display a single artist vertically

void displayOneArtist(const char artistId[], const char name[], char gender, const char phone[], const char email[])

Parameters

- artistId, name, phone, email are strings and gender is a char that contains the artist information to be displayed

Return

- No return

39. deleteArtist

Handles delete choice.

void deleteArtist(char artistIds[][8], char names[][40], char genders[], char phones[][11], char emails[][80], char artistIdsRefs[][8], char albumIds[][8], char titles[][80], char recordFormats[][20], char datePublished[][11], char paths[][100], int & nArtist, int & nAlbum)

Parameters

- artistIds, names, genders, phones, emails are arrays that contains the artist information in an array
- nArtist is the number of artist information currently existing in the arrays
- artistIdRefs, char albumIds, titles, recordFormat, datePublished, paths are arrays to be loaded with album information
- nAlbum is the number of albums information currently existing in the arrays

Return

- No return value

40. removeArtist

Handles delete choice

void removeArtist(char artistId[][8], char name[][40], char phone[][11],char email[][80], int selectedIdx, int & nArtist)

Parameters

- artistIds, names, genders, phones, emails are arrays that contains the artist information in an array
- nArtist is the number of artist information currently existing in the arrays
- selectedIndex is the index of the target to be deleted

Note: to delete an artist first all albums of the artist must be deleted

Return

- No return value

41. removArtistAllAlbums

removes all albums of the artist

void removeArtistAllAlbums(const char artistId[], char artistIdsRefs[][8], char albumIds[][8], char titles[][80], char recordFormats[][20], char datePublished[][11], char paths[][100], int & nAlbum)

Parameters

- artistId is the id of the artist whose albums to remove
- artistIdRefs, char albumIds, titles, recordFormat, datePublished, paths are arrays to be loaded with album information
- nAlbum is the number of albums information currently existing in the arrays

Return

- No return value

42. albumManager

Manages album information

bool albumManager((const char artistIds[][8], const char artistNames[][40], int nArtist, char artistIdsRef[][8], char albumIds[][10], char titles[][80], char recordFormats[][12], char datePublisheds[][11], char paths[][100], int & nAlbum)

Parameters

- artistIds, artistNames are array containing artist id and names from artist information
- nArtist is the number of record in artist arrays
- artistIdsRef, albumIds, titles, recordFormats, datePublisheds, paths, are arrays that contains the artist information in an array
- nAlbum is the number of album information currently existing in the arrays
- lastAlbumId is the last added added id(the largest)

Return

- The function returns a bool value representing whether the user chooses exit or not

43. AlbumMenu

Displays the album menu: (View Artist Albums, Edit Artist Album, Back To Main Menu, Exit) and allow the user to choose and returns the user choice

int albumMenu()

Parameter

- No parameters

Return

- The function returns an integer value representing the user selection

44. albumViewer

Handles the view album choice

bool albumViewer(const char artistIds[][8], const char artistNames[][40]], int nArtist, const char artistIdsRef[][8], const char albumIds[][10], const char titles[][80], const char recordFormats[][12], const char datePublisheds[][11], const char paths[][100], int nAlbum)

Parameters

- artistIds, artistNames are array containing artist id and names from artist information
- nArtist is the number of record in artist arrays
- artistIdsRef, albumIds, titles, recordFormats, datePublisheds, paths, are arrays that contains the album information in an array
- nAlbum is the number of album information currently existing in the arrays

Return

- The function returns a bool value representing whether the user chooses exit or not

45. viewAlbumMenu

Displays the views menu: (Display All Album, View Album By Search, Back To Main Menu, Exit), and allow the user to chose and returns the user choice

int viewAlbumMenu()

Parameters

- No parameters

Return

- The function returns an integer value representing the user selection

46. displayAllAlbums

Displays all album with their detail categorized by artistId

void displayAllAlbums(const char artistIds[8], const char artistNames[40], const char artistIdsRef[][8], const char albumIds[][10], const char titles[][80], const char recordFormats[][12], const char datePublisheds[][11], const char paths[][100], int nAlbum)

Parameters

- artistIds, artistNames are the id and name of the artist whose albums we want to display
- artistIdsRef, albumIds, titles, recordFormats, datePublisheds, paths, are arrays that contains the album information in an array
- nAlbum is the number of album information currently existing in the arrays

Return

- The function returns nothing

47. searchAlbumByArtistId

Searches artist by artist id. The result contains all album of a given artist

void searchAlbumByArtistId(const char artistIdsRefs[][8], int nAlbum, const char target[], int result[], int * noResult)

Parameters

- artistIdsRefs, is an array that contains the artist id reference in album information
- nAlbum is the number of albums information currently existing in the arrays
- result is an array that is going to contain the index position of the matching records
- target is the target artist id to be searched
- noResult is the number of matching record

Return

- The function returns nothing

48. displayAlbumSearchResult

Displays album search result

void displayAlbumSearchResult(const char artistIds[8], const char artistNames[40], const char artistIdsRef[][8], const char albumIds[][10], const char titles[][80], const char recordFormats[][12], const char datePublisheds[][11], const char paths[][100], const int result[], int noResult)

Parameters

- artistIds, artistNames are the id and name of the artist whose albums we want to display
- artistIdsRef, albumIds, titles, recordFormats, datePublisheds, paths, are arrays that contains the album information in an array
- nAlbum is the number of album information currently existing in the arrays
- nArtist is the number of artist information currently existing in the arrays
- result is the search result array
- noResult is the number of matching record

Return

- The function returns nothing

49. albumEditor

Handles the edit album choice. Allow the user to add, edit or remove album

bool albumEditor(const char artistIds[][8], const char artistNames[][40], int nArtist, char artistIdsRef[][8], char albumIds[][10], char titles[][80], char recordFormats[][12], char datePublisheds[][11], char paths[][100], int & nAlbum)

Parameters

- nArtist is the number of artist information currently existing in the artist arrays
- artistIds, artistNames are array containing artist id and names from artist information
- artistIdsRef, albumIds, titles, recordFormats, datePublisheds, paths, are arrays that contains the album information in an array
- nAlbum is the number of album information currently existing in the arrays

Return

- The function returns a bool value representing whether the user chooses exit or not

50. editAlbumMenu

Displays the views menu: (Add Artist Album, Edit Artist Album, Delete Artist Album, Back To Main Menu, Exit), and allow the user to choose and returns the user choice

int viewArtistMenu()

Parameters

- No parameters

Return

- The function returns an integer value representing the user selection

51. addAlbum

handles the add artist album menu item

bool addAlbum(const char artistIds[][8], const char artistNames[][40], int nArtist, artistIdsRef[][8], char albumIds[][10], char titles[][80], char recordFormats[][12], char datePublisheds[][11], char paths[][100], int & nAlbum)

Parameters

- artistIds, artistNames are array containing artist id and names from artist information
- artistIdsRef, albumIds, titles, recordFormats, datePublisheds, paths, are arrays that contains the album information in an array
- nAlbum is the number of album information currently existing in the arrays

Return

- The function returns bool representing success or failure

52. getAlbumInfo

This gets album info from user

void getArtistInfo (char titles[], recordFormats[], char datePublisheds[], char paths[])

Parameters

- titles, recordFormat, datePublished, path are variables to hold album info

Return

- The function returns nothing

53. getAlbumTitle

This gets album title from user

void getAlbumTitle (char title[])

Parameters

- title, is album title

Return

- The function returns nothing

54. getAlbumRecordFormat

This gets album record format from user

void getAlbumRecordFormat(char albumFormat[])

Parameters

- albumFormat is a string representing the format of the record to be filled

Return

- No return

55. getAlbumDate

This gets the date on which the album is published

void getAlbumDate (char albumDate[])

Parameters

- albumDate is a string representing the date of the album published to be filled

Return

- The function returns nothing

56. getAlbumPath

This gets the directory path of the album from user

void getAlbumPath (char albumPath[])

Parameters

- albumPath is a string representing the album path of the album

Return

- The function returns nothing

57. validateAlbumTitle

This validates Album title

bool validateAlbumTitle (const char albumTitle[])

Parameters

- title, is album title

Return

- The function returns true if the title is valid otherwise returns false

58. FormatAlbumTitle

This formats album title

void formatAlbumTitle (char albumTitle[])

Parameters

- title, is album title

Return

- No return

59. validateAlbumFormat

This validates Album

bool validateAlbumFormat (const char albumFormat[])

Parameters

- albumFormat, is album record format

Return

- The function returns true if the format is valid otherwise returns false

60. formatAlbumFormat

This formats album record format

void formatAlbumFormat(char albumFormat[])

Parameters

- albumFormat, is album record format

Return

- No return

61. validateAlbumDate

This validates album path

bool validateAlbumDate(unsigned int day, unsigned int mmonth, unsigned int year)

Parameters

- day, month, year is the date the album is published

Return

- The function returns true if the path is valid otherwise returns false

62. FormatAlbumDate

This formats album date

void formatAlbumPath(char albumDate[], unsigned int day, unsigned int month, unsigned int year)

Parameters

- day, month, year is the date the album is published
- albumPath, is used to return the formatted date of the album

Return

- No return

63. validateAlbumPath

This validates album path

bool validateAlbumPath(const char albumPath[])

Parameters

- albumPath, is path of the album

Return

- The function returns true if the path is valid otherwise returns false

64. FormatAlbumPath

This formats album path

void formatAlbumPath(char albumFormat[])

Parameters

- albumPath, is the path of the album

Return

- No return

65. editAlbum

handles the Edit Artist Album menu item

void editAlbum(const char artistIds[][8], const char artistNames[][40], int nArtist, char artistIdsRef[][8], char albumIds[][10], char titles[][80], char recordFormats[][12], char datePublisheds[][11], char paths[][100], int nAlbum)

Parameters

- nArtist is the number of artist information currently existing in the artist arrays
- artistIds, artistNames are array containing artist id and names from artist information
- artistIdsRef, albumIds, titles, recordFormats, datePublisheds, paths, are arrays that contains the album information in an array
- nAlbum is the number of album information currently existing in the arrays

Return

- No return value

66. selectAlbum

Display the search result and allow the user to select the album to edit or remove. And returns the selected album

void selectAlbum(const char artistId[], const char artistName[], const char artistIdsRef[][8], const char albumIds[][10], const char titles[][80], const char recordFormats[][12], const char datePublisheds[][11], const char paths[][100], const int result[], int noResult. int forWhat)

Parameters

- ArtistId and artistName are the id and name of the artist whose album is going to be edited
- artistIdsRef, albumIds, titles, recordFormats, datePublisheds, paths, are arrays that contains the album information in an array
- result is search result array containing the index of the matching artist
- noResuit is the number of matching artist in result array
- forWhat o for view,1 for edit 2 for delete

Return

- Returns the selected album position

67. editAlbumInfo

Allow the user to edit Album field by field until the user is done. Returns status(changed or not)

bool editAlbumInfo(const char artistIdsRef[], const char albumIds[], char titles[], char recordFormats[], char datePublisheds[], char paths[])

Parameters

- artistIdsRef, albumIds, titles, recordFormats, datePublisheds, paths, are arrays that contains the album information to be edited

Return

- Returns true if the record is changed otherwise false

68. displayOneAlbum

Display a single album vertically

void displayOneArtist(const char artistIdsRef[], const char albumIds[], char titles[], char recordFormats[], char datePublisheds[], const char paths[])

Parameters

- artistIdsRef, albumIds, titles, recordFormats, datePublisheds, paths, are arrays that contains the album information to be edited

Return

- No return

69. deleteAlbum

Handles delete choice.

void deleteAlbum(const char artistIds[][8], const char artistNames[][40], int nArtist, char artistIdsRef[][8], char albumIds[][10], titles[][80], recordFormats[][12], char datePublisheds[][11], char paths[][100], int & nAlbum)

Parameters

- nArtist is the number of artist information currently existing in the artist arrays
- artistIds, artistNames are array containing artist id and names from artist information

- artistIdsRef, albumIds, titles, recordFormats, datePublisheds, paths, are arrays that contains the album information in an array
- nAlbum is the number of album information currently existing in the arrays

Return

- No return value

70. removeAlbum

removes album

void removeAlbum(char artistIdsRef[][8], char albumIds[][10], titles[][80], recordFormats[][12], char datePublisheds[][11], char paths[][100], int & nAlbum, int selectedIdx,)

Parameters

- artistIdsRef, albumIds, titles, recordFormats, datePublisheds, paths, are arrays that contains the album information in an array
- nArtist is the number of artist information currently existing in the arrays
- selectedIndex is the index of the target to be deleted

Return

- No return value

71. farewell()

Displays a farewell message to the user

void farewell ()

Parameters

- No parameter

Return

- No return