Must be able to borrow digital media which includes E-books, Movies, Songs, Video-games, Apps, Podcasts and Images. Users who have borrowed the items in question must be able to rate them.
Each digital media item must store corresponding attributes:
E-book; title, author, language, number of pages, year of publication and ISBN
Movie; title, director, genres, release year, language and duration
Song; title, composer, singer, genre, file type, duration and language
Video-game; title, genre, publisher, release year and supported platforms
App; title, version, publisher, supported platforms and file size
Podcast; title, release year, host(s), guest(s), episode number and language
Images; title, resolution, file format, file size and date taken

The system must support three different types of users: Admin, Employee and Borrower. Each user must have a name, age and social security number. On startup a user must verify a user type.

Borrowers interact with the program by listing items by type, previewing details about specific items, and performing actions specific to the media type.
Employees manage items in the collection by adding and removing items.
Admins have all rights of the Employees, with the addition of managing Borrowers and Employees. In this regard, managing includes viewing, creating, deleting and updating information of users.

The available actions of each user is presented in a clear and structured way.

The console interface should be made with scalability in mind, and potential errors must be handled.

Verbs:

- **Borrow** (media items)

- **Rate** (borrowed items)

- **List** (items by type)
- **Preview** (item details)
- **Select** (specific item)
- **Manage** (collection)
- **Add** (media items)
- **Remove** (media items)
- **Verify** (user role at startup)
- **View** (user information)
- **Create** (user accounts)
- **Delete** (user accounts)
- **Update** (user information)
- **Validate** (inputs)

- **Handle** (errors)

Nouns:

- **Items**
    - E-book
    - Movie
    - Song
    - Video Game
    - App
    - Podcast
    - Image

- **User**
    - Borrower
    - Employee
    - Admin

- **Attributes**
    - Name
    - Age
    - Social Security Number

- **Console Interface**
- **Error**
- **Action**
- **Item Details**
- **Rating**

CRC-kort:

MediaItem (abstract class)

Responsibilities	Collaborators
Must be able to store common attributes	Borrower
Must have preview() abstract method	E-book
	Movie
	Song
	Video-game
	App
	Podcast
	Image

Ebook

Responsibilities	Collaborators
Implement read() method	Borrower
Implement concrete preview() method	MediaItems
Implement concrete download() method	
Must store: title, author, language, number of pages, year of publication and ISBN	

Movie

Responsibilities	Collaborators
Implement play() method	Borrower
Implement concrete preview() method	MediaItems
Implement concrete download() method	
Must store title, director, genres, release year, language and duration	

Song

Responsibilities	Collaborators
Implement play() method	Borrower
Implement concrete preview() method	MediaItems
Implement concrete download() method	
Must store: title, composer, singer, genre, file type, duration and language	

Video-game

Responsibilities	Collaborators
Implement play() method	Borrower
implement concrete preview() method	MediaItems
Implement concrete download() method	
Must store: title, genre, publisher, release year and supported platforms	

App

Responsibilities	Collaborators
Implement run() method	Borrower
implement concrete preview() method	MediaItems
Implement concrete download() method	
Must store: title, version, publisher, supported platforms and file size	

Podcast

Responsibilities	Collaborators
Implement play() method	Borrower
implement concrete preview() method	MediaItems
Implement concrete download() method	
Must store: title, release year, host(s), guest(s), episode number and language	

Image

Responsibilities	Collaborators
Implement display() method	Borrower
implement concrete preview() method	MediaItems
Implement concrete download() method	
Must store: title, resolution, file format, file size and date taken	

User (abstract class)

Responsibilities	Collaborators
Must store attributes (name, age, social security number)	Borrower
	Employee
implement verifyRole() method at startup	Admin

Borrower

Responsibilities	Collaborators
Implement borrow(item) method	E-book
Implement rate(item) method	Movie
Implement listItems() method	Song
Implement preview(item) method	Video-game
	App
	Podcast
	Image

Employee

Responsibilities	Collaborators
Implement add(MediaItem) method	MediaItem
Implement remove(MediaItem) method	E-book
	Movie
	Song
	Video-game
	App
	Podcast
	Image

Admin

Responsibilities	Collaborators
Must have all Employee responsibilities (add, remove)	Employee
implement createUser() method	MediaItem
Implement deleteUser() method	E-book
Implement updateUser() method	Movie
Implement viewUser() method	Song
	Video-game
	App
	Podcast
	Image

Interfaces:

IPlayable

Responsibilities	Collaborators
Implement abstract play() method	Movie
	Song
	Video-games
	Podcast

IRateable

Responsibilities	Collaborators
Implement abstract rate() method	MediaItem
	E-book
	Movie
	Song
	Video-game
	App
	Podcast
	Image

IDisplayable

Responsibilities	Collaborators
Implement abstract Display() method	Image

IRunable

Responsibilities	Collaborators
Implement abstract Run() method	App

IReadable

Responsibilities	Collaborators
Implement abstract Read() method	E-book

IBorrowable

Responsibilities	Collaborators
Implement abstract Borrow() method	App

IDownloadable

Responsibilities	Collaborators
Implement abstract download() method	MediaItem
	E-book
	Movie
	Song
	Video-game
	App
	Podcast
	Image

IPreviewable

Responsibilities	Collaborators
Implement abstract preview() method	MediaItem
	E-book
	Movie
	Song
	Video-game
	App
	Podcast
	Image