

Program Specification

bold = Verbs

Cursive = Nouns & Yellow

Sønderborg's library aims to **launch** a digital platform to manage and **share** its diverse digital media collection. The system should **support** **multiple types of media**, including:

- **E-books** with information about their **title, author, language, number of pages, year of publication and ISBN**. Users can **view, download** and **read** them.
- **Movies** with information about their **title, director, genres, release year, language and duration**. Users can **watch** and **download** them.
- **Songs** with information about their **title, composer, singer, genre, file type, duration and language**. Users can **play** and **download** them.
- **Video-games** with information about their **title, genre, publisher, release year and supported platforms**. Users can **download, play** and eventually **complete** them.
- **Apps** with information about their **title, version, publisher, supported platforms and file size**. Users can **download** and **execute** them
- **Podcasts** with information about their **title, release year, host(s), guest(s), episode number and language**. Users can **download** and **listen** to an **episode** and **complete** it.
- **Images** with information about their **title, resolution, file format, file size and date taken**. Users can **download** and **display** an **image**

Users should be able to **borrow** all **media** items, and only **users** who have **borrowed** an **item** may **rate it**.

The system must also **support** two categories of **users**: **Admin, Employee** and **Borrower**. For each of these **the system** needs to know the **name, age** and **social security number**. As a starting point, **user authentication** is not required. However on startup, **the program** should ask the **user** to **identify** their role.

- **Borrower** interact with the collection by **listing items** by **type**, **selecting** and **previewing** details, **rating items**, and **performing** actions specific to the **media** type.
- **Employee** is **responsible** for managing **the collection** with the ability to **add** or **remove media** items
- **Admin** has all of an **Employee's rights** and can additionally **manage Borrowers** and **Employees**. **Management** covers **viewing, creating, deleting, updating the personal information of users**.

The supported actions should be **made available** to all **user** categories in a clear and structured way.

The console interface should guide the **user** with clear instructions and **validate** all inputs. **Errors** or **invalid actions** should **not pass** this filter. **The design** should **anticipate growth** through extensibility, ensuring that new **media** types or **user roles** can be **added** without disrupting existing functionality.