Programming for Design
Project 2 - Book Information Website

Program Pseudocode

Keir Herbert (u3211239)

For the group:

Keir Herbert
Michael Coward
Sujith Kumar

Contents

Project2.html

```
Display books.jpg background

Set web browser tab/window title

Define external W3.css style sheet relationship

Create title banner

        Define panel and colour

        Display heading and sub-heading

        Display name and ID number

End panel section

Create container for table

        Create table with JavaScript reference ID

        Create table column headings

                Set heading background colour

                Add column headings

        End table heading

        Start table body with JavaScript reference ID

End table section

Run JavaScript program isbn.js

Run JavaScript program classes.js

Run JavaScript program main.js
```

classes.js

class bookCover

    Define input parameters and default values

    Pass input values into class properties

    Prefix size value with "-"

    Convert key property to uppercase and append "/"

    Define first part of book cover URL

    Define last part of book cover URL

display method

    Combine URL strings with key, ISBN, and size properties to form valid URL

    Return assembled URL string

class bookDetail

    Define input parameters and default values

    Pass input values into class properties

    Convert key property to uppercase and append colon

    Pass output from bookCover class into bc property

    Define first part of URL for collecting the JSON object

    Define last part of URL for collecting the JSON object

    Make available detail property and set to null

size method

    Default value to small

    Pass input value into bc sub-class property

cover method

    Return book cover image

getDetail method

    Call getBookDetail function to collect the JSON object data

    Populate this.detail with returned data

getAuthor method

    Create listOfAuthors variable and set to null

    Setup loop with no end condition (always ends in a caught error)

    Attempt to collect author value from JSON object and append to any previous ones

    Catch a failed attempt to get author value

    Failed on first attempt?

        If yes, return "No authors found" response

        Else, return list of authors

getTitle method

    Create variable bookTitle

    Return book's title from JSON object

    Return bookTitle as result

getPublisher method

    Create listOfPublishers variable and set to null

    Setup loop with no end condition (always ends in a caught error)

    Attempt to collect publisher value from JSON object and append to any previous ones

    Catch a failed attempt to get publisher value

    Failed on first attempt?

        If yes, return "No publishers found" response

        Else, return listOfPublishers

getPublishedDate method

    Collect published date from JSON object

    Value returned?

    If not, return "N/A" string

    Else, return published date

getPageCount method

    Collect page count from JSON object

    Is returned value an integer?

        If yes, return page count as result

        Else, return "N/A" string

class movieInfo

Define accepted input parameters and default values

Define first section of URL string

Read key input value into object

Define second section of URL string

Remove spaces from input movie value and store in object

getInfo method

Call the getMovieInfo function to collect JSON object data

Populate this.detail with returned data

getMovieTitle method

Create listOfMediaTitles variable and set to null

Setup loop with no end condition (always ends in a caught error)

Attempt to collect title value from JSON object and append to any previous ones

Catch a failed attempt to get title value

Failed on first attempt?

    If yes, return "No associated media" response

    Else, return listOfMediaTitles

getBookDetail function

Combine two URL parts with key and ISBN value to form URL

Use URL to fetch HTML data from API

Convert response into JSON format

Did API call fail?

    If yes, alert user with pop-up message

    Else, return JSON object data

getMovieInfo function

Combine two URL parts with key and movie value to form URL

Use URL to fetch the HTML data from the API

Convert response into JSON format

Did API call fail?

    If yes, alert user with pop-up message

    Else, return JSON object data

Main.js

```
        Create constant tableOfBooks pointing to HTML element

        Dimension array bookDetails

        Dimension array movieDetails

        Create array index variable and set to zero

        Loop until reaching end of ISBN array

                Create variable book to hold object data collected by getDetail

                Call getDetail and wait to complete

                Push collected details into bookDetails

                Create variable movie to hold object data collected by getInfo

                Call getInfo and wait to complete

                Push collected details into movieDetails

                Insert row into HTML table and link to variable 'row'

                Insert new cell into row at column 0 and link to variable cover

                Insert new cell into row at column 1 and link to variable title

                Insert new cell into row at column 2 and link to variable author

                Insert new cell into row at column 3 and link to variable publisher

                Insert new cell into row at column 4 and link to variable
                publishedDate

                Insert new cell into row at column 5 and link to variable pageCount

                Insert new cell into row at column 6 and link to variable filmTV

                Place book cover image into cell called cover

                Place book cover image into cell called title

                Place book cover image into cell called author

                Place book cover image into cell called publisher

                Place book cover image into cell called publishDate

                Place book cover image into cell called pageCount

                Place book cover image into cell called filmTV

        Increment array index

End function main


End of program
```