הכנה לשיעור הבא

<mark>סעיף 1:</mark>

יש ליצור dll בשם **BO** המכיל את המחלקות הבאות:

- מחלקה המייצגת Author
  - Name - (string - min 3 max 20)
  - Age - (int between 18-120)
  - Image - (string - min 5 chars)

- מחלקה המייצגת book
  - BookName - (string - min 2 max 15)
  - NumOfPages - (int - between 20-1500)
  - Price - (decimal - between 30 -200)
  - Author - (Author class object)

<mark>סעיף 2:</mark>

יש ליצור טבלאות מתאימות בdb עבור שמירת נתוני הauthors וה books

דגשים:

- יש ליצור מפתח ראשי של id לכל טבלה - המפתח יקודם בצורה אוטומטית בכל הוספת רשומה.
- יש ליצור את ה Name של הAuthor עם הגדרה של ערך ייחודי
- יש ליצור את ה BookName של הBook עם הגדרה של ערך ייחודי

<mark>סעיף 3:</mark>

יש ליצור את שכבת ה DAL על ידי EF כך שיוכל לגשת ל - DB מסעיף 2

<mark>סעיף 4:</mark>

יש ליצור dll בשם BLL המכיל קישור לDAL (מסעיף 3) ולBO (מסעיף 1),
בתוך הBLL יש ליצור שני מחלקות:

- AuthorManager - with crud to Author table (use EF from DAL)

- BookManager - with crud to Book table (use EF from DAL)

<mark>סעיף 5:</mark>

יש ליצור פרוייקט של web-api המכיל קישור לBLL (מסעיף 4) ולBO (מסעיף 1),
בתוך הweb-api יש ליצור שני controllers :

AuthorController - with the following actions:

- Get - without parameters - will return array of Author (the class is defined in the BO),
  The web-api will call the AuthorManager in the BLL
  The BLL will create an object of the EF from the DAL, and pass all the authors to the web-api

- Get - with id parameter (int) - will return an Aouthor (the class is defined in the BO),
  The web-api will call the AuthorManager in the BLL
  The BLL will create an object of the EF from the DAL, and pass the author with the required id to the web-api

- Post - with an Aouthor parameter (the class is defined in the BO) - will return a boolean value.
  The web-api will call the AuthorManger in the BLL
  The BLL will create an object of the EF from the DAL
  The BLL will try to add the author to the db, and return to the web api a boolean value that indicates if the action has completed successfully or not.

- put - with id parameter (int) and an Aouthor parameter (the class is defined in the BO) - will return a boolean value
  The web-api will call the AuthorManger in the BLL
  The BLL will create an object of the EF from the DAL
  The BLL will try to edit the author in the db, and then return to the web api a boolean value that indicates if the action has completed successfully or not.

- delete - with id parameter (int) - will return a boolean value
  The web-api will call the AuthorManger in the BLL
  The BLL will create an object of the EF from the DAL
  The BLL will try to delete the author from the db, and then return to the web api a boolean value that indicates if the action has completed successfully

BookController - with the following actions:

- Get - without parameters - will return array of Book (the class is defined in the BO),
  The web-api will call the BookManager in the BLL
  The BLL will create an object of the EF from the DAL, and pass all the books to the web-api

- Get - with id parameter (int) - will return an Book (the class is defined in the BO),
  The web-api will call the BookManager in the BLL
  The BLL will create an object of the EF from the DAL, and pass the book with the required id to the web-api

- Post - with an Book parameter (the class is defined in the BO) - will return a boolean value.
  The web-api will call the BookManger in the BLL,
  The BLL will create an object of the EF from the DAL
  The BLL will try to add the book to the db, and then return to the web api a boolean value that indicates if the action has completed successfully

- put - with id parameter (int) and an Book parameter (the class is defined in the BO) - will return a boolean value

The web-api will call the BookManger in the BLL

The BLL will create an object of the EF from the DAL

The BLL will try to edit the book in the db, and then return to the web api a boolean value that indicates if the action has completed successfully

- delete - with id parameter (int) - will return a boolean value

The web-api will call the BookManger in the BLL

The BLL will create an object of the EF from the DAL

The BLL will try to delete the book from the db, and then return to the web api a boolean value that indicates if the action has completed successfully

הערה: בפעולות put ו post יש לוודא בweb-api שהModel תקין - ורק אם הוא תקין לבצע קריאה ל BLL