Functional Requirements for IT English Learning Web Application

The IT English Learning web application is a platform designed to aid users in learning English for IT purposes. It includes features such as registration and user login, a personal dashboard, a word trainer section, and a technical book library.

Registration and Login

- The web application must provide a registration form for users to create an account.
- Users must be able to log in to the system using their username and password.
- If a user forgets their password, they should be able to reset it using their email.

Personal Dashboard

- Users should have a personal dashboard that displays their progress in learning English for IT purposes.
- The dashboard should include a graph that shows the user's daily progress in terms of the number of correct and incorrect answers given during word trainer sessions.
- The dashboard should also provide the user with access to a list of text-based advice on how to prepare for IT job interviews.

Word Trainer

- The word trainer section should allow users to input English words based on their Ukrainian translations.
- The system should provide users with hints in the form of placeholder text that displays the correct answer.
- The system should include a button for users to reveal the correct answer if they are unable to provide it.
- The system should allow users to add their own words to the database for learning.

Technical Book Library

- The technical book library should provide users with access to a variety of English language IT-related books.
- The system should allow users to browse for books based on their titles and authors.

- The system should provide users with the ability to mark books as read and track their reading progress.

Technologies Used

The IT English Learning web application is built using the following technologies:

- Entity Framework
- ASP.NET Core
- HTML
- CSS
- PostgreSql

Technologies Used

Account Management System

№	Role	Use case	Description
1	User	Sign Up	The user can create a personal account
2		Login	Login to personal account
3		Reset password	If the user has forgotten the password, he can recover it using email

Personal Account

№	Role	Use case	Description
1	User	View personal account	In your personal account, you can view statistics and get advice on studying
2		Logout	Exiting the personal account and moving to the login page

Word Trainer

№	Role	Use case	Description
1	User	Add words	Ability to add words to the database for efficient study
2		Enter a word	The possibility of entering a word to check the acquired knowledge
3		Use a hint	The ability to use a hint spoils the statistics for the user, but motivates learning more

Technical book library

№	Role	Use case	Description
1	User	View library	Browse available books to read
2		Choose a book to read	Ability to choose a book to read
3		Mark book as read	The ability to mark a book as read for better orientation in the library

Use case diagrams for user

Account Management System

User

Sign Up — «include» → Choose email, password — «extends» → Display signup error

Login — «include» → Verify email and password
Login ← «extends» — Display login error
Login ← «extends» — Reset password

Word Trainer

User

Add words

Enter a word ← «extends» — Enter correct answer
Enter a word ← «extends» — Use a hint
Enter a word ← «extends» — Enter wrong answer

Technical Book Library

User

View library ← «extends» — A possibility to mark a book as read

Choose a book to read — «include» → Read a book