

Reader's diary

Vision

'Reader's diary' is a web-application which allows users to record information about the books they've already read and information about the writers of these books. The application should provide:

- storing books and writers in a database;
- viewing the list of books;
- changing the list of books (adding, editing, removing);
- viewing the list of writers;
- changing the list of writers(adding, editing, removing);
- displaying number of the writer's books;
- book filtration by date of reading;
- book filtration by its writer.

1. Books.

1.1. Show the list of books

This mode is used for displaying the list of books.

Main script

- 1) User clicks 'Books' button.
- 2) Then the list of books appears. It is a table with 6 columns:
 - Name – name of the book.
 - Writer – writer of the book.
 - Genre – genre of the book.
 - Date of reading – date when user finished reading the book.
 - Number of pages
 - Rating from 0 (the worst) to 5 (the best) – show user's opinion about the book.

Information is displayed in alphabetical order by name.

The screenshot shows the 'Reader's Diary' web application. At the top is a dark blue header with a book icon and the title 'Reader's Diary'. Below this is a navigation bar with two tabs: 'Books' (selected) and 'Writers'. The main content area is titled 'Books' and contains a form for adding new books. The form has a 'Select writer' dropdown, a 'Select date from' calendar, a 'to' calendar, an 'Accept' button, a 'Clear' button, and an 'Add' button. Below the form is a table with the following columns: Name, Writer, Genre, Date of reading, Number of pages, and Rating. The table contains four rows of data, each with 'Edit' and 'Delete' buttons.

Name	Writer	Genre	Date of reading	Number of pages	Rating
Война и мир	Лев Толстой	роман	01.03.2017	1508	★★★★☆
Идиот	Федор Достоевский	роман	01.04.2018	249	★★★★☆
Мастер и Маргарита	Михаил Булгаков	фантастика	01.04.2018	375	★★★★★
Преступление и наказание	Федор Достоевский	роман	01.04.2018	239	★★★★☆

Fig. 1.1 Show the list of books

Filtration by date of reading

It is possible to view the list of books read during a certain period of time. To do this user can choose start and end dates and use filter by date of reading.

Start date mustn't be greater than end date.

Default and minimal value of start date: 01.01.2000.

Default and maximal value of end date: today's date.

User clicks 'Update' button and then the data is updated and displayed.

Filtration by writer

It is possible to view the list of books of a certain writer. To do this user can use filter by writer.

To select a writer the list of all possible writers is displayed.

User clicks 'Update' button and then the data is updated and displayed.

1.2. Add a book to the list

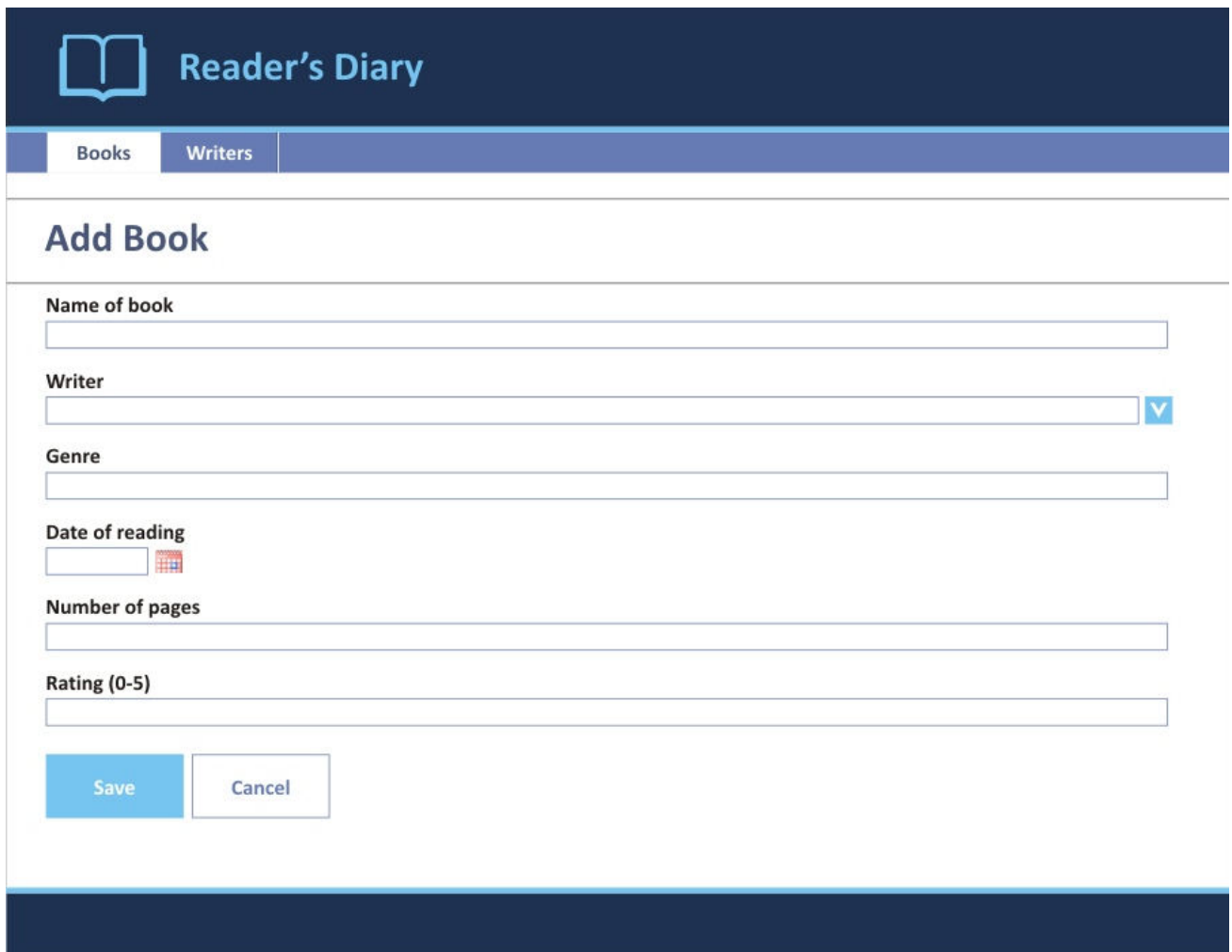
This mode is used for adding a new book to the list of books.

Main script

- 1) In mode 'Show the list of books' user clicks 'Add' button.
- 2) An adding form appears.
- 3) User fills in all necessary fields and then clicks 'Save' button.
- 4) If entered data is incorrect, a warning message is shown ('Some of the fields are incorrectly filled in. Please, check and fix them up.').
- 5) If entered data is correct, then the book is added to the database.
- 6) If an error connected with saving data occurs, an error message appears ('An error occurred while saving the record to the database.').
- 7) If any other errors occur, a corresponding error message appears.
- 8) If the book is successfully added to the database, the list of books is displayed.

Cancel script

- 1) In mode 'Show the list of books' user clicks 'Add' button.
- 2) An adding form appears.
- 3) User fills in some fields and then clicks 'Cancel' button.
- 4) Entered data isn't saved in the database and the list of books is displayed.



Reader's Diary


Books Writers

Add Book

Name of book

Writer
 ▼

Genre

Date of reading
 

Number of pages

Rating (0-5)

Save Cancel

Fig. 1.2 Add a book to the list

Fields which are used in adding and their validation:

- Name
Borders: 2 – 255 characters. Obligatory.
- Writer
It is chosen from all existing writers. Obligatory.
- Genre
Borders: 3 – 31 characters. Optional.
- Date of reading
Date value. Borders: 01.01.2000 – today's date. Default: today's date. Obligatory.
- Number of pages
Integer value. Borders: 10 – 9999. Optional.
- Rating
Borders: 0 – 5. Integer value. Obligatory.

1.3. Edit a book from the list

This mode is used for editing a book from the list of books.

Main script

- 1) In mode '**Show the list of books**' user clicks '**Edit**' button in the row with a chosen book.
- 2) An editing form appears with the fields filled in.
- 3) User edits all necessary fields and then clicks '**Save**' button.

- 4) If entered data is incorrect, a warning message is shown ('Some of the fields are incorrectly filled in. Please, check and fix them up.').
- 5) If entered data is correct, then the book is updated in the database.
- 6) If an error connected with saving data occurs, an error message appears ('An error occurred while updating the record in the database.').
- 7) If any other errors occur, a corresponding error message appears.
- 8) If the book is successfully updated in the database, the changed list of books is displayed.

Cancel script

- 1) In mode 'Show the list of books' user clicks 'Edit' button in the row with a chosen book.
- 2) An editing form appears with the fields filled in.
- 3) User edits some fields and then clicks 'Cancel' button.
- 4) Entered data isn't saved in the database and the list of books is displayed.

The screenshot shows the 'Reader's Diary' application interface. At the top, there is a dark blue header with a book icon and the text 'Reader's Diary'. Below the header is a navigation bar with two tabs: 'Books' and 'Writers'. The 'Books' tab is active. The main content area is titled 'Edit Book'. It contains several form fields: 'Name of book' with the value 'Война и мир', 'Writer' with a dropdown menu showing 'Лев Толстой', 'Genre' with the value 'роман', 'Date of reading' with a date picker showing '01.03.2017', 'Number of pages' with the value '1508', and 'Rating (0-5)' with the value '2'. At the bottom of the form are two buttons: 'Save' (highlighted in blue) and 'Cancel'.

Fig. 1.3 Edit a book from the list

Validation and fields which are used in editing are the same as in adding. (see sect. 1.2.):

- Name
- Writer
- Genre
- Date of reading
- Number of pages
- Rating

1.4. Remove a book from the list

This mode is used for removing a book from the list of books.

Main script

- 1) In mode 'Show the list of books' user clicks 'Delete' button in the row with a chosen book.
- 2) A confirm dialog window is displayed. ('Do you really want to delete the book '<name of book>'?')
- 3) User clicks 'Yes' button.
- 4) The book is deleted in the database.
- 5) If an error connected with deleting data occurs, an error message appears ('An error occurred while deleting the record from the database.').
- 6) If the book is successfully deleted from the database, the changed list of books is displayed.

Cancel script

- 1) In mode 'Show the list of books' user clicks 'Delete' button in the row with a chosen book.
- 2) A confirm dialog window is displayed. ('Do you really want to delete the book '<name of book>'?')
- 3) User clicks 'No' button.
- 4) The book is not deleted in the database and the list of books is displayed.

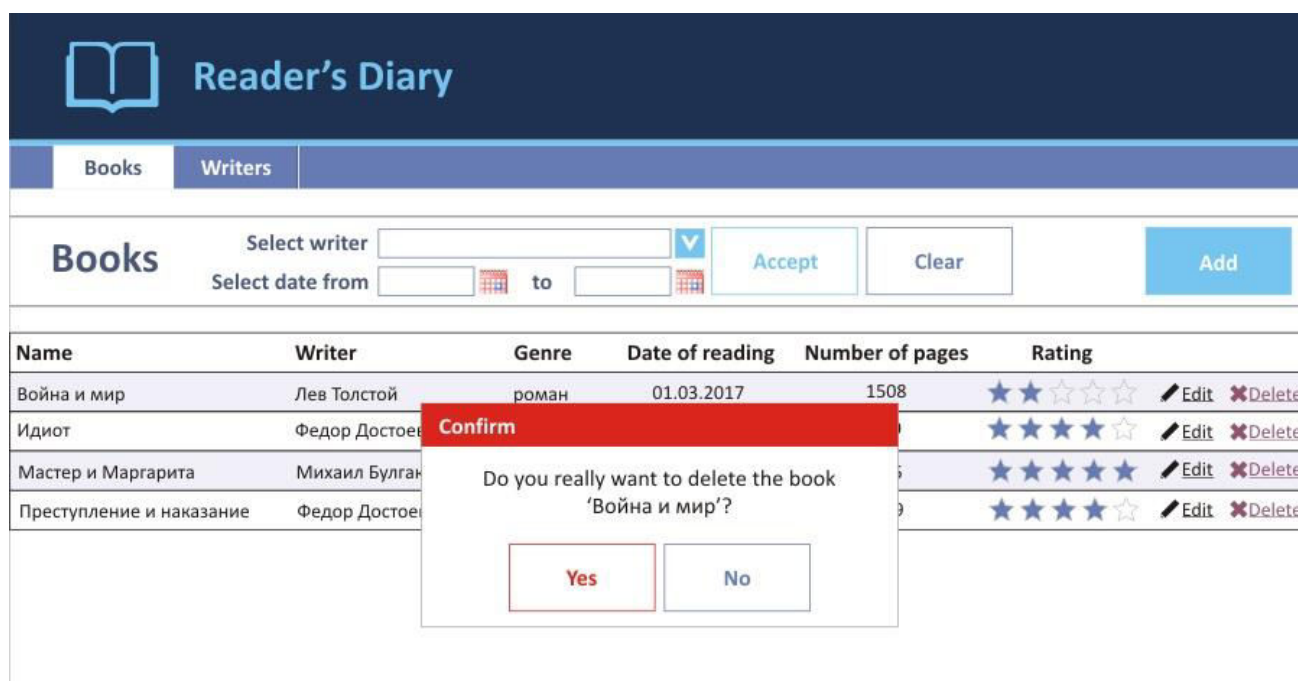


Fig. 1.4 Remove a book from the list

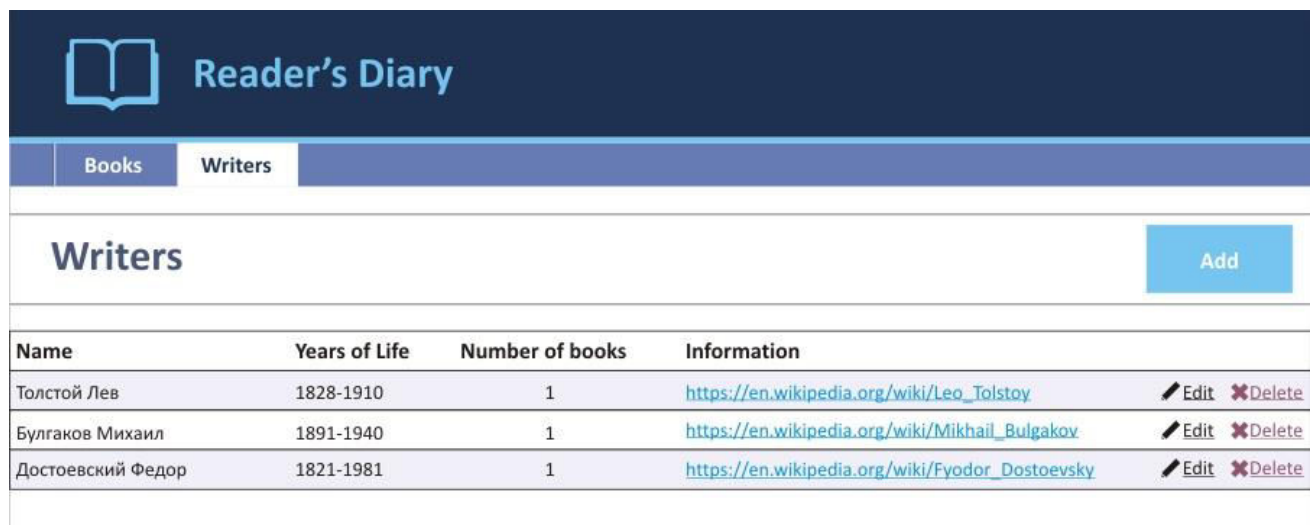
2. Writers.

2.1. Show the list of writers

This mode is used for displaying the list of writers.

Main script

- 1) User clicks 'Writers' button.
- 2) Then the list of writers appears. It is a table with 6 columns:
 - Name – the writer's name and surname.
 - Years of life – years of the writer's life.
 - Number of books – number of the writer's books.
 - Information – hyperlink to an article with information about the writer.



Name	Years of Life	Number of books	Information	
Толстой Лев	1828-1910	1	https://en.wikipedia.org/wiki/Leo_Tolstoy	Edit Delete
Булгаков Михаил	1891-1940	1	https://en.wikipedia.org/wiki/Mikhail_Bulgakov	Edit Delete
Достоевский Федор	1821-1981	1	https://en.wikipedia.org/wiki/Fyodor_Dostoevsky	Edit Delete

Fig. 2.1 Show the list of writers

2.2. Add a writer to the list

This mode is used for adding a new writer to the list of writers.

Main script

- 1) In mode 'Show the list of writers' user clicks 'Add' button.
- 2) An adding form appears.
- 3) User fills in all necessary fields. and then clicks 'Save' button.
- 4) If entered data is incorrect, a warning message is shown ('Some of the fields are incorrectly filled in. Please, check and fix them up.').
- 5) If entered data is correct, then the writer is added to the database.
- 6) If an error connected with saving data occurs, an error message appears ('An error occurred while saving the record to the database.').
- 7) If any other errors occur, a corresponding error message appears.
- 8) If the writer is successfully added to the database, the list of writers is displayed.

Cancel script

- 1) In mode 'Show the list of writers' user clicks 'Add' button.
- 2) An adding form appears.
- 3) User fills in some fields and then clicks 'Cancel' button.
- 4) Entered data isn't saved in the database and the list of writers is displayed.

The screenshot shows the 'Reader's Diary' application interface. At the top, there is a dark blue header with a book icon and the text 'Reader's Diary'. Below the header is a navigation bar with two tabs: 'Books' and 'Writers'. The 'Writers' tab is currently selected. The main content area is titled 'Add Writer' and contains a form with the following fields: 'Name', 'Surname', 'Year of birth', 'Year of death (if necessary)', and 'Hyperlink with information'. Each field has a corresponding text input box. At the bottom of the form, there are two buttons: 'Save' (in blue) and 'Cancel' (in white with a blue border). The entire form is enclosed in a light gray border.

Fig. 2.2 Add a writer to the list

Fields which are used in adding and their validation:

- Name
Borders: 1-255 characters. Obligatory.
- Surname
Borders: 1-255 characters. Obligatory.
- Year of birth
Integer value. Borders: 1– current year minus 10 years. Obligatory.
- Year of death
Integer value. Borders: year of birth – current year. Optional.
- Hyperlink with information
Hyperlink value. Must satisfy the template of URL. Optional.

2.3. Edit a book from the list

This mode is used for editing the writer form the list of writers.

Main script

- 1) In mode '**Show the list of writers**' user clicks '**Edit**' button in the row with a chosen writer.
- 2) An editing form appears with the fields filled in.
- 3) User edits all necessary fields and then clicks '**Save**' button.

- 4) If entered data is incorrect, a warning message is shown ('Some of the fields are incorrectly filled in. Please, check and fix them up.').
- 5) If entered data is correct, then the writer is updated in the database.
- 6) If an error connected with saving data occurs, an error message appears ('An error occurred while updating the record in the database.').
- 7) If any other errors occur, a corresponding error message appears.
- 8) If the writer is successfully updated in the database, the changed list of writers is displayed.

Cancel script

- 1) In mode 'Show the list of writers' user clicks 'Edit' button in the row with a chosen writer.
- 2) An editing form appears with the fields filled in.
- 3) User edits some fields and then clicks 'Cancel' button.
- 4) Entered data isn't saved in the database and the list of writers is displayed.

The screenshot shows the 'Reader's Diary' application interface. At the top, there is a dark blue header with a book icon and the text 'Reader's Diary'. Below the header is a navigation bar with two tabs: 'Books' and 'Writers'. The 'Writers' tab is selected. The main content area is titled 'Edit Writer'. It contains several input fields with labels: 'Name' (with the value 'Лев'), 'Surname' (with the value 'Толстой'), 'Year of birth' (with the value '1828'), 'Year of death (if necessary)' (with the value '1910'), and 'Hyperlink with information' (with the value 'https://en.wikipedia.org/wiki/Leo_Tolstoy'). At the bottom of the form are two buttons: 'Save' (highlighted in blue) and 'Cancel'.

Fig. 2.3 Edit a writer from the list

Validation and fields which are used in editing are the same as in adding. (see sect. 2.2.)

- Name
- Surname
- Year of birth
- Year of death
- Hyperlink with information

2.4. Remove a writer from the list

This mode is used for removing a writer from the list of writers.

Main script

- 1) In mode 'Show the list of writers' user clicks 'Delete' button in the row with a chosen book.
- 2) If this writer has at least one of his books in the list of books, a warning message is shown. ('This writer cannot be deleted because he has some books in the book list. To delete him first remove all of his books.')
- 3) Otherwise confirm dialog window is displayed. ('Do you really want to delete the writer '<name of writer>'?')
- 4) User clicks 'Yes' button.
- 5) The writer is deleted in the database.
- 6) If an error connected with deleting data occurs, an error message appears ('An error occurred while deleting the record from the database.').
- 7) If any other errors occur, a corresponding error message appears.
- 8) If the writer is successfully deleted from the database, the changed list of writers is displayed.

Cancel script

- 1) In mode 'Show the list of writers' user clicks 'Delete' button in the row with a chosen writer.
- 2) If this writer has at least one of his books in the list of books, a warning message is shown. ('This writer cannot be deleted because he has some books in the book list. To delete him first remove all of his books.')
- 3) Otherwise confirm dialog window is displayed. ('Do you really want to delete the writer '<name of writer>'?')
- 4) User clicks 'No' button.
- 5) The writer is not deleted in the database and the list of writers is displayed.

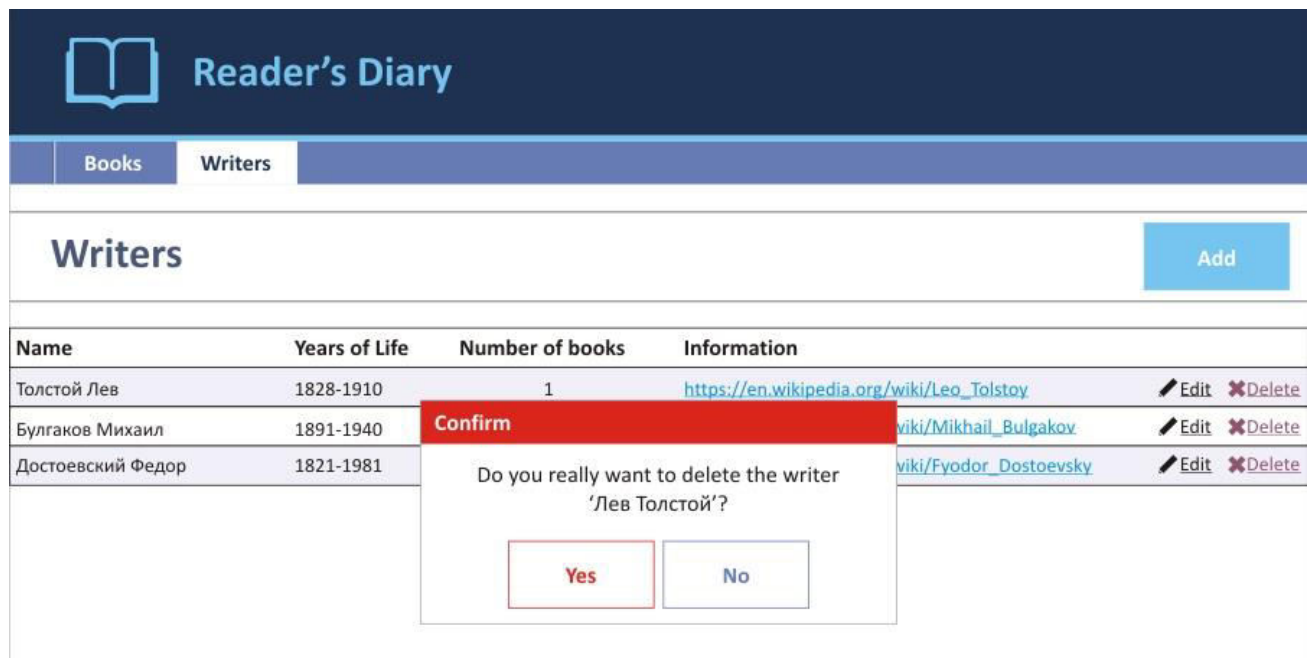


Fig. 2.4 Remove a writer from the list