In this laboratory work we should choose the web-project with the implementation of web patterns. I have decided to work with news website.

The pattern I have used is MVC (Model-View-Controller).

Class News acts like a model: this contains data, which application uses for some operations. In this case, we use getters and setters only.

```java
public class News {
        private String title;
        private String author;
        public String getTitle() {
                return title;
        }
        public void setTitle(String title) {
                this.title = title;
        }
        public String getAuthor() {
                return author;
        }
        public void setAuthor(String author) {
                this.author = author;
        }

}
```

The view is something that will represent the data on the browser. The view is a component of the system to display the state of the model in a human readable representation. It does not change the data directly,but data is changed by the controller. As we need to show our content using a browser, I have decided to write the need information in the program and represent it by writing the information into the file.

```java
news1.setTitle("KFW 2014");
news1.setAuthor("Евгений Овчинников");
```

And then,

```java
        File logFile = new File("news1.txt");
                writeFile = new FileWriter(logFile);
                writeFile.append("Title:        "+title+"    ");
                writeFile.append("\n");
                writeFile.append("        Written by:      "+ author);
The following text will be written in the file news1.txt
```

After that we also need to show it with the browser, so we just read the file line by line using BufferedReader:

```java
        BufferedReader br = new BufferedReader(new FileReader("news1.txt"));
                        String line=" ";
                        line=br.readLine();
                        while (line!=null)
                        {
                         response=response+line+ "\n";
                         line =br.readLine();
                        }
                        br.close();
```

The controller is a means by which users interact with the system. In class NewsController we set the specified title and the author through the model.

```java
public void setNewsTitle(String title){
        model.setTitle(title);
    }

    public String getNewsTitle(){
        return model.getTitle();
    }

    public void setNewsAuthor(String author){
        model.setAuthor(author);
    }

    public String getNewsAuthor(){
        return model.getAuthor();
    }
```

The main purpose and feature of MVC pattern is to separate layers. The idea of this pattern is that the controller and the presentation model are dependent on the model, but the model does not depend on these two components.