

Software projects

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on B.Sc and M.Sc**

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01

Education





Education



INTERNATIONAL
UNIVERSITY



浙江理工大学
Zhejiang Sci-Tech University

- Bachelor degree (Almaty city, Kazakhstan) :
Kazakhstan State Educational Grant &
Scholarship (2011 - 2015)
Major: Information Systems

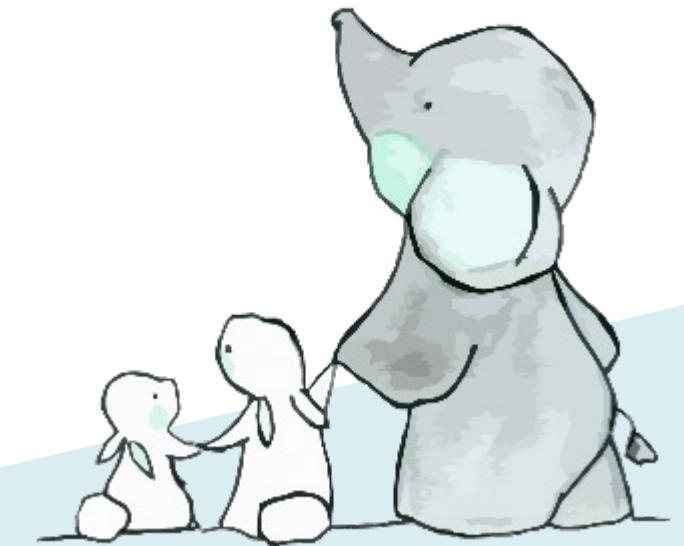
- Master degree (Hangzhou city, China) :
Zhejiang Sci – Tech University President Scholarship
(2017 - 2020)
Major: Computer Applied Technology



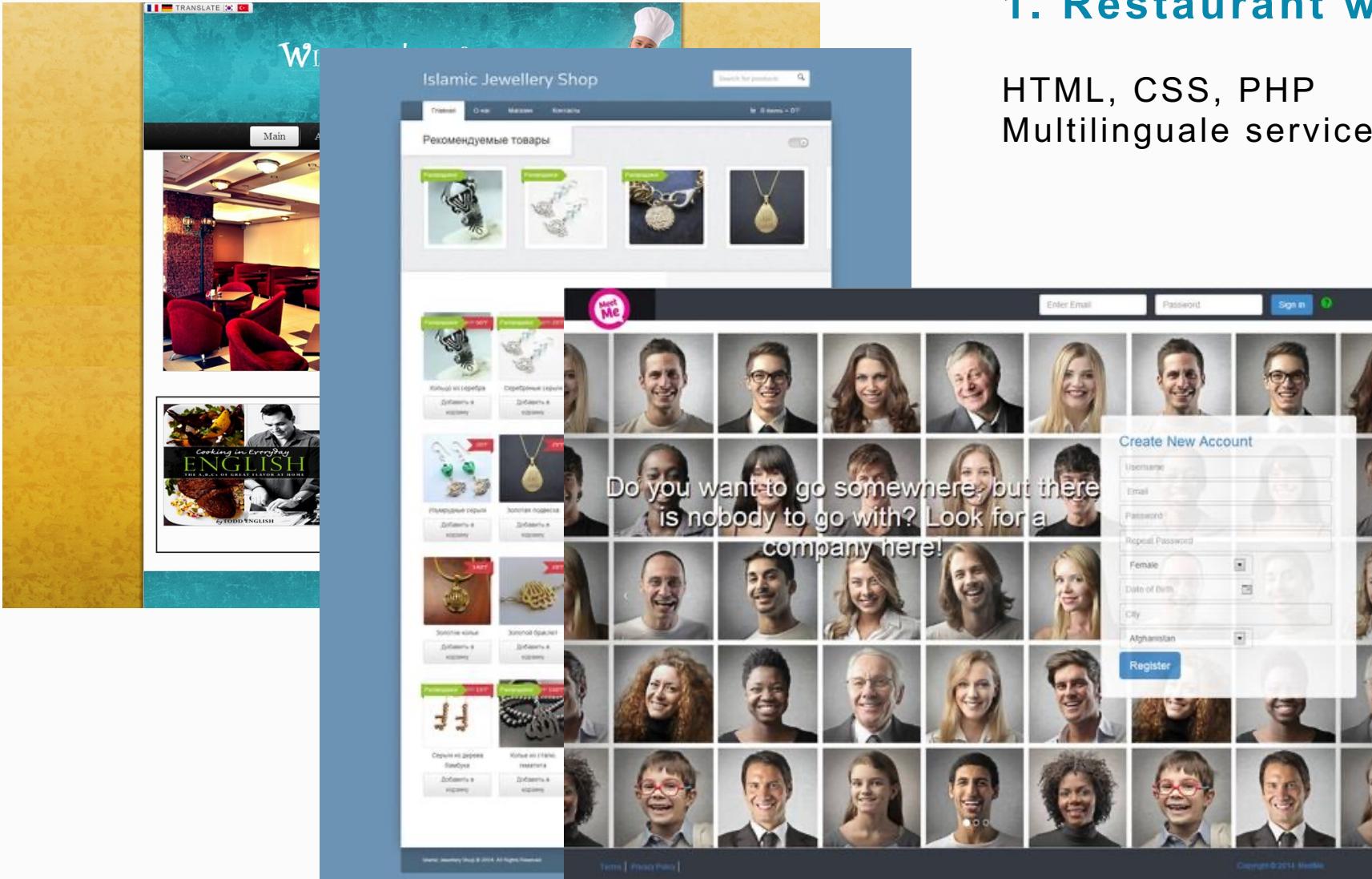
02

Software projects

on B.Sc and M.Sc



Project #1



1. Restaurant website

HTML, CSS, PHP
Multilingual service

2. Online shop

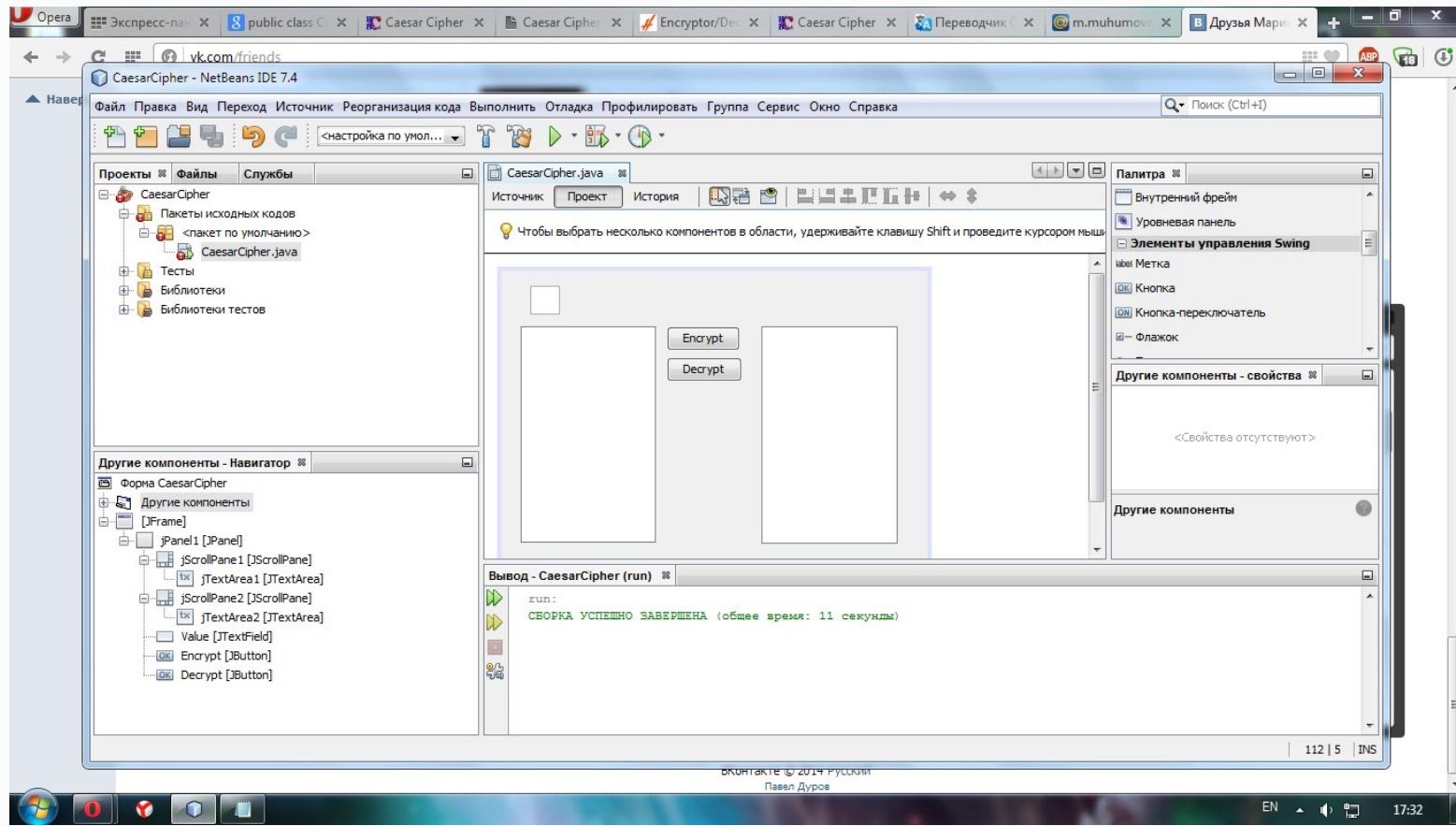
CMS Wordpress
HTML, CSS, PHP
Woocommerce

3. Social network

PHP Framework
HTML, CSS, PHP
Writing Posts, Likes
Registration of profiles



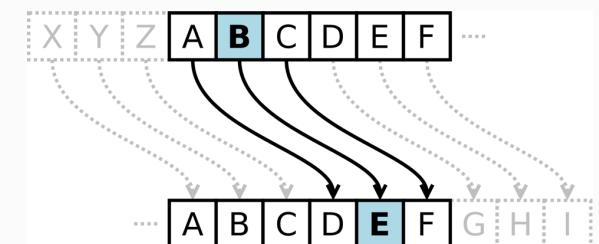
Project #2



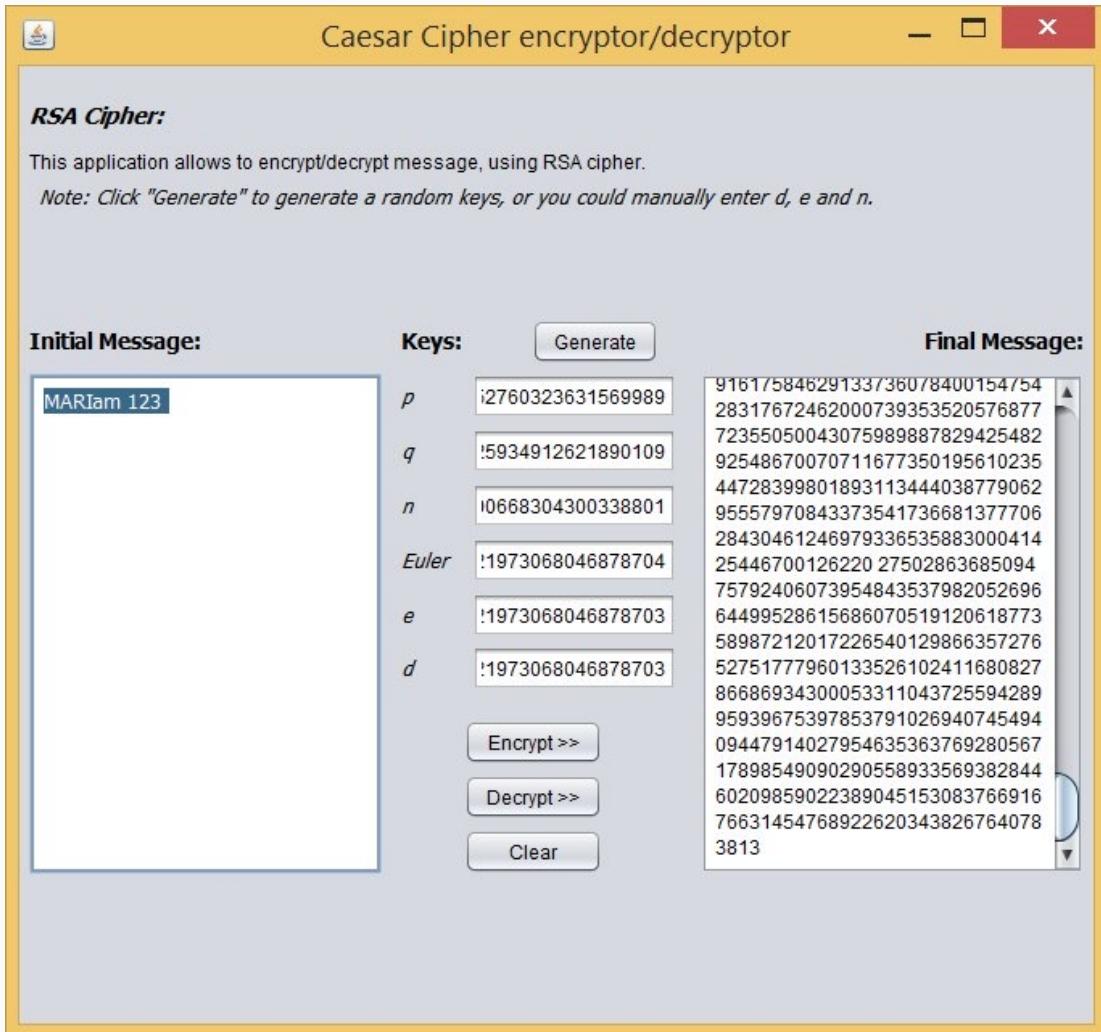
1. Caesar Cipher

Java, GUI application

A Caesar cipher is a type of substitution cipher in which each character in the plaintext is replaced by a character located some constant number of positions to the left or right of it in the alphabet. For example, in a shift 3 cipher, A would be replaced by D, B would become D, and so on.



Project #3



2. RSA Cipher

Java, GUI application

The application generates p and q numbers, the rest is automatically calculated according to the algorithm. The most important thing when we want to do encrypt in plaintext is that you can enter both text and numbers, but in ciphertext it displays only numbers when we press encrypt.

Project #3

More details about RSA Cipher

Firstly you need to generate public and private keys:

- Take two large primes p and q.
- Let's define n as the result of multiplying p on q ($n = p \cdot q$).
- Let's choose a random number, which we will call d. This number must be coprime (have no common divisor other than 1) with the result of multiplication $(p-1) \cdot (q-1)$.
- Let's define a number e for which the following relation $(e \cdot d) \bmod ((p-1) \cdot (q-1)) = 1$ is true.
- Let's call the public key the numbers e and n, and the secret - d and n.

In order to encrypt data using the public key {e,n}, you need the following:

- Split the ciphertext into blocks, each of which can be represented as a number $M(i)=0,1,2,\dots, n-1$ (i.e. only up to $n-1$).
- Encrypt the text, considered as a sequence of numbers $M(i)$ according to the formula $C(i)=(M(i)^e)\bmod n$.



Project #4

The screenshot shows a Java development environment with two code editors and a running application window.

Code Editors:

- Main.java:** Contains the main method and imports for `java.awt.Graphics` and `java.awt.event.WindowEvent`. It also includes imports for `java.util.*`, `java.lang.Math`, and `java.awt.geom.Point`.
- Koch.java:** Contains the implementation of the Koch curve algorithm. It defines a `drawKochLine` method that recursively divides a line segment into three segments and adds a middle segment at a 60-degree angle. The `paint` method creates a `Graphics2D` object and calls `drawKochLine` to draw the fractal curve.

Running Application:

A window titled "Koch curve" displays a highly detailed fractal curve (Koch island) on a white background. The window has a standard title bar and a close button.

Output Window:

The output window shows the command "run:" followed by a redacted run log.

2. Curve Koch

Java, GUI application

1. 0 – square
2. 1 – generator
3. 2 – Koch island
4. 3 – Koch island with colored borders

Project #4

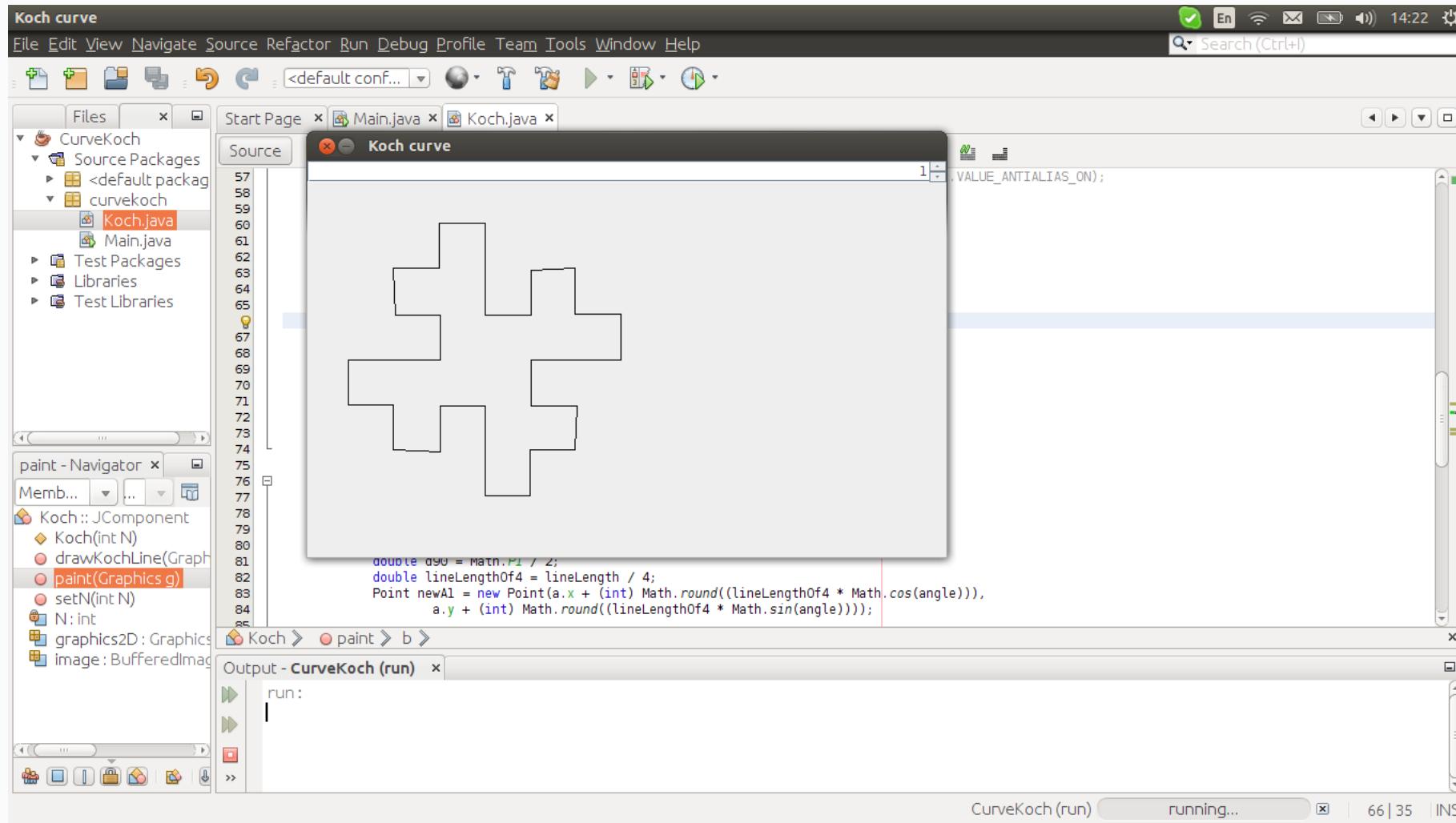
The screenshot shows a Java development environment with the following interface elements:

- Toolbar:** Standard file operations like New, Open, Save, Cut, Copy, Paste, Find, and Replace.
- MenuBar:** File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window, Help.
- Search Bar:** Search (Ctrl+).
- Project Explorer:** Shows the project structure under CurveKoch:
 - Source Packages: <default package>, curvekoch
 - Java files: Koch.java (selected), Main.java
 - Test Packages, Libraries, Test Libraries
- Code Editor:** The Koch.java file is open, showing the implementation of the Koch curve algorithm. A red vertical bar highlights the current line of code.

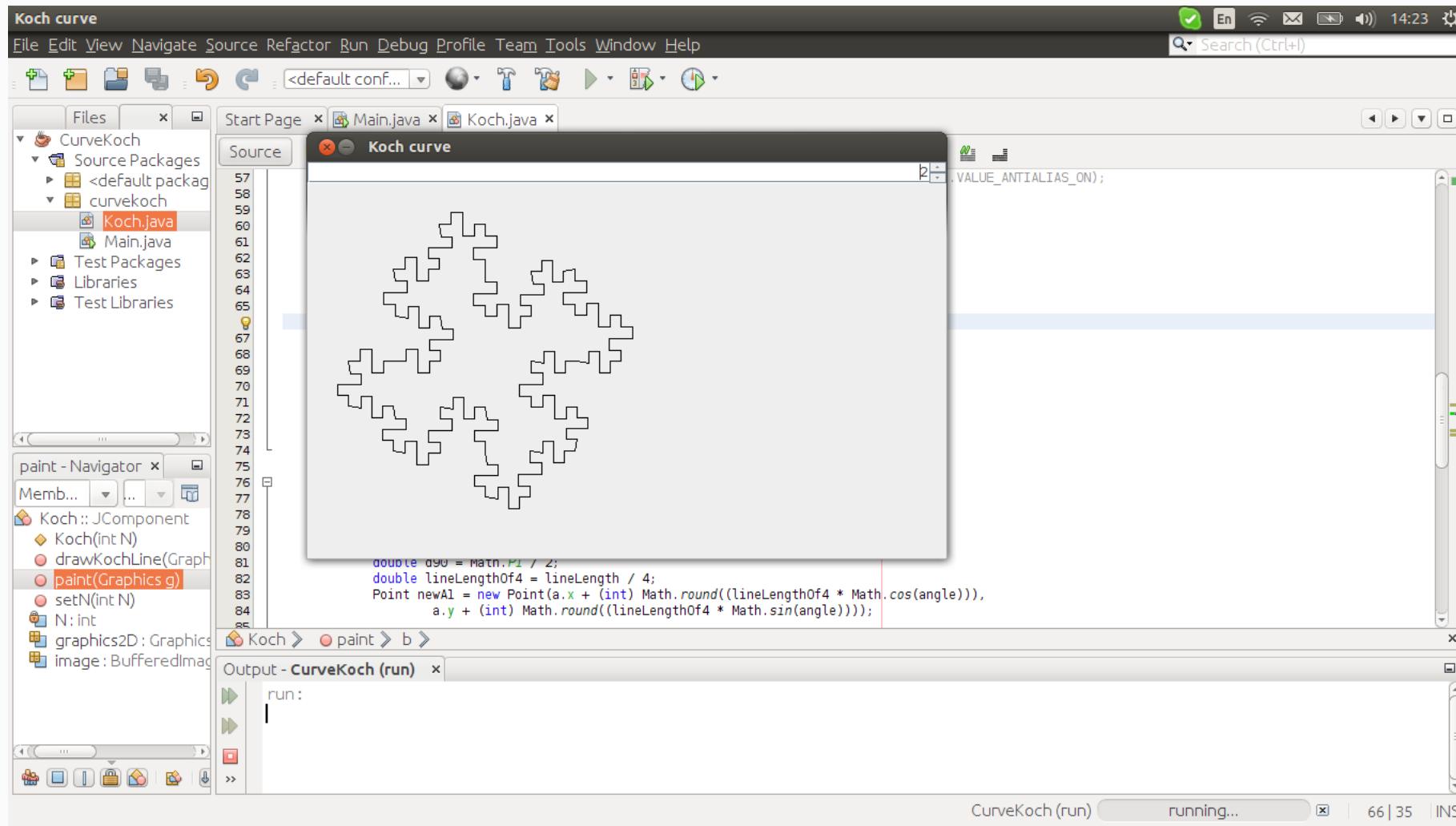
```
double a90 = Math.PI / 2;
double lineLengthOf4 = lineLength / 4;
Point newA1 = new Point(a.x + (int) Math.round((lineLengthOf4 * Math.cos(angle))),
a.y + (int) Math.round((lineLengthOf4 * Math.sin(angle))));
```
- Output Window:** Shows the output of the run command for CurveKoch (run). It displays "run:" followed by a series of small squares representing the generated fractal curve.
- Status Bar:** Shows the current run configuration (CurveKoch (run)), status (running...), page numbers (66 | 35), and other system information.



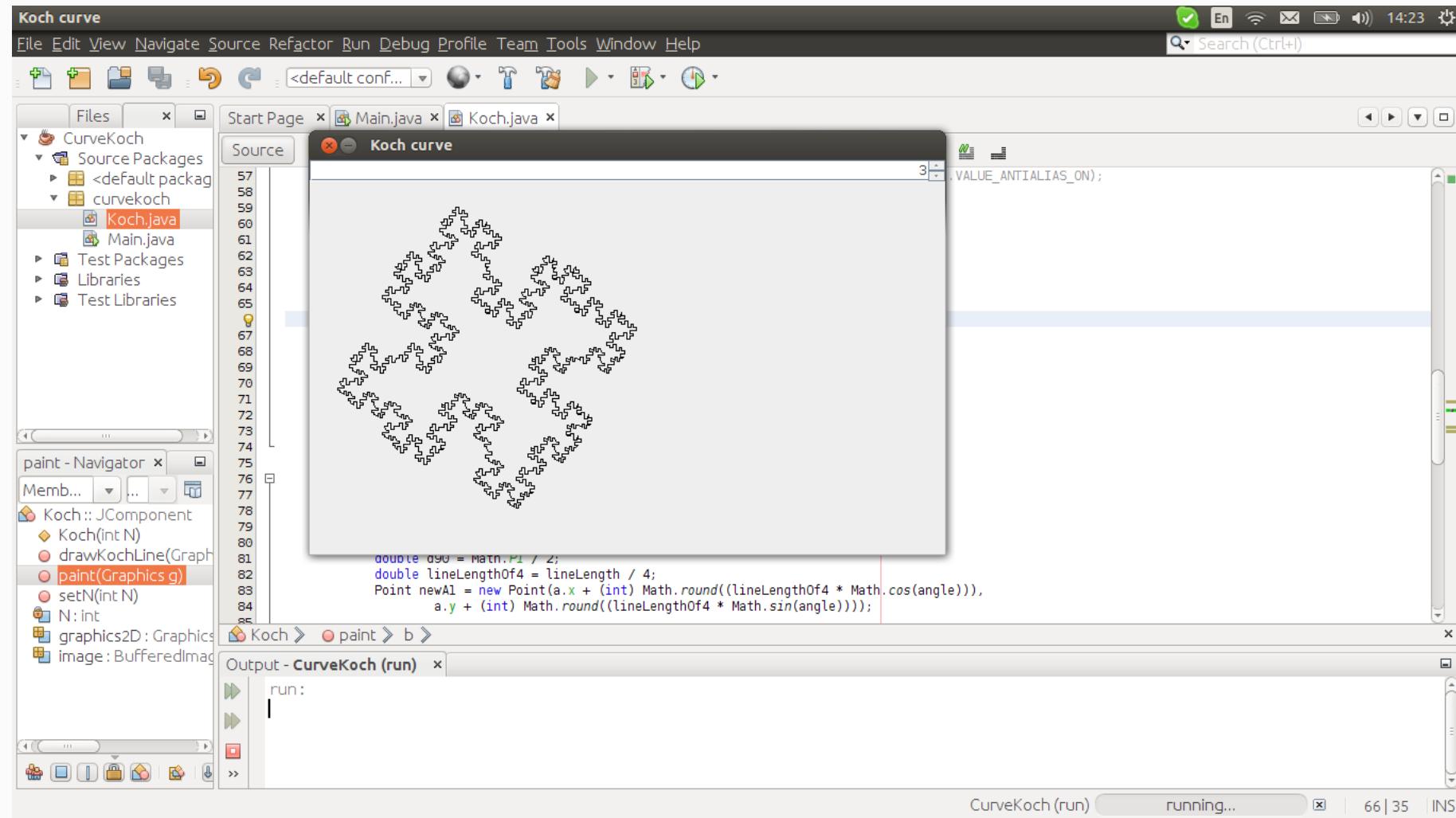
Project #4



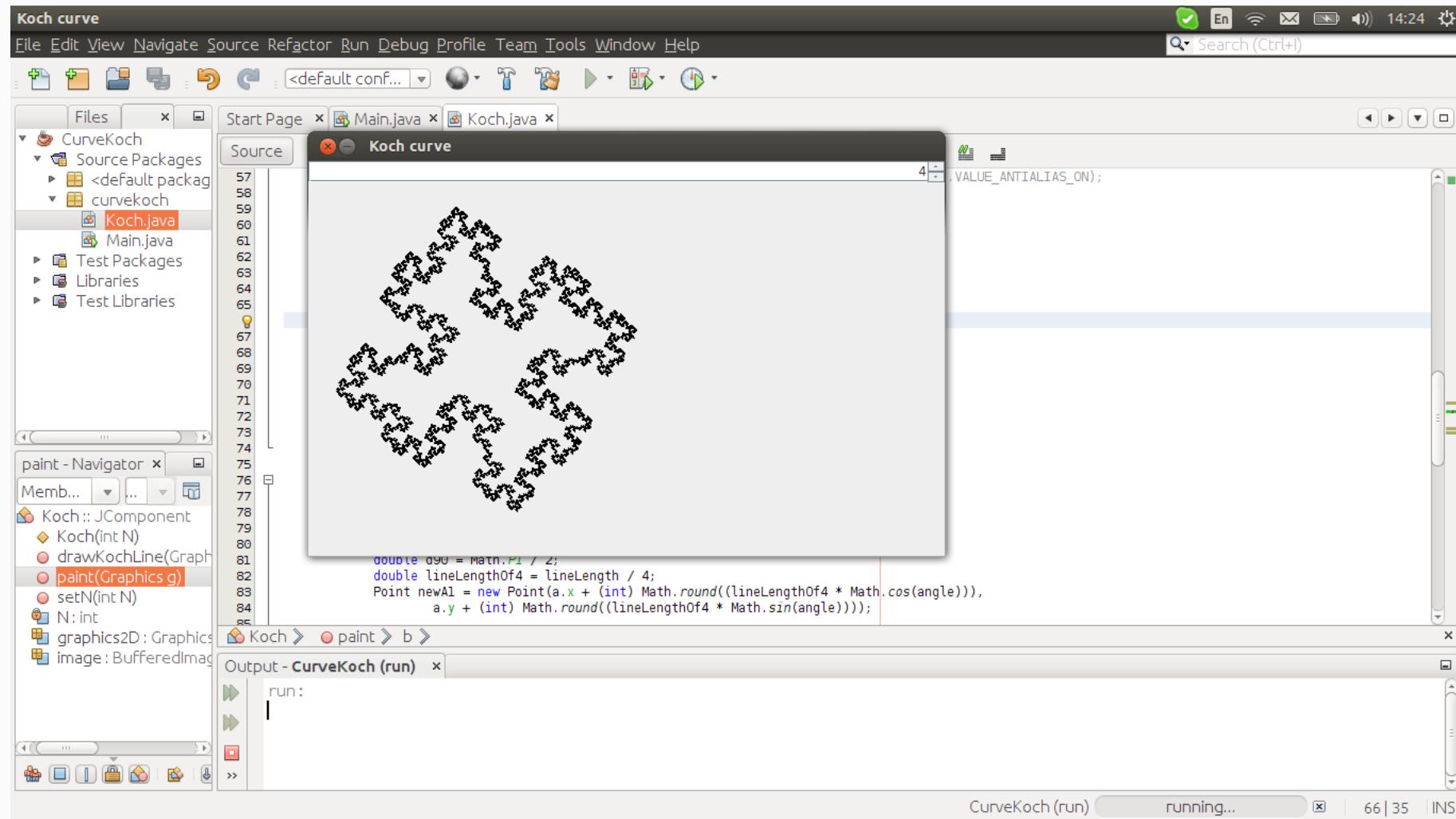
Project #4



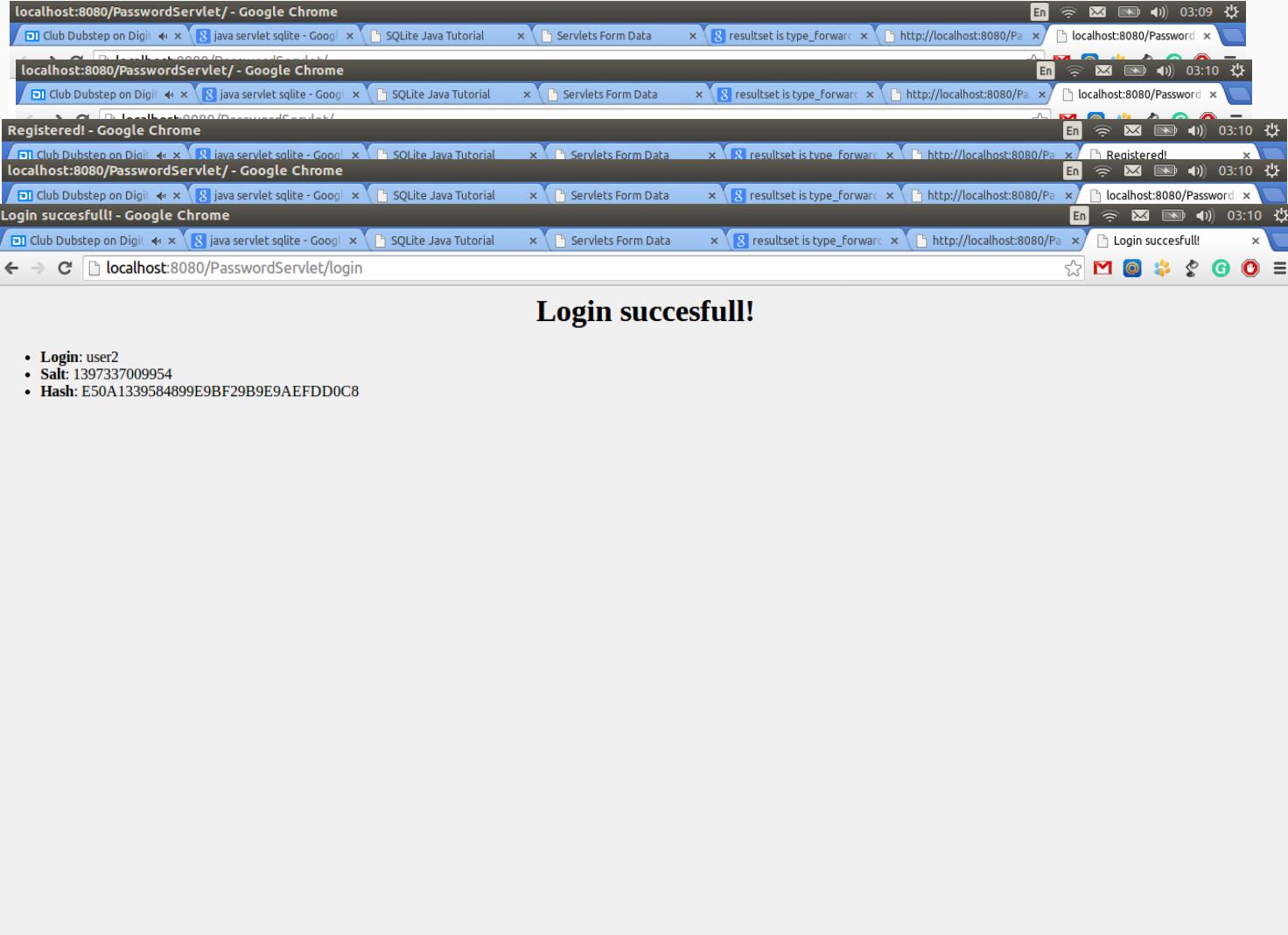
Project #4



Project #4



Project #5



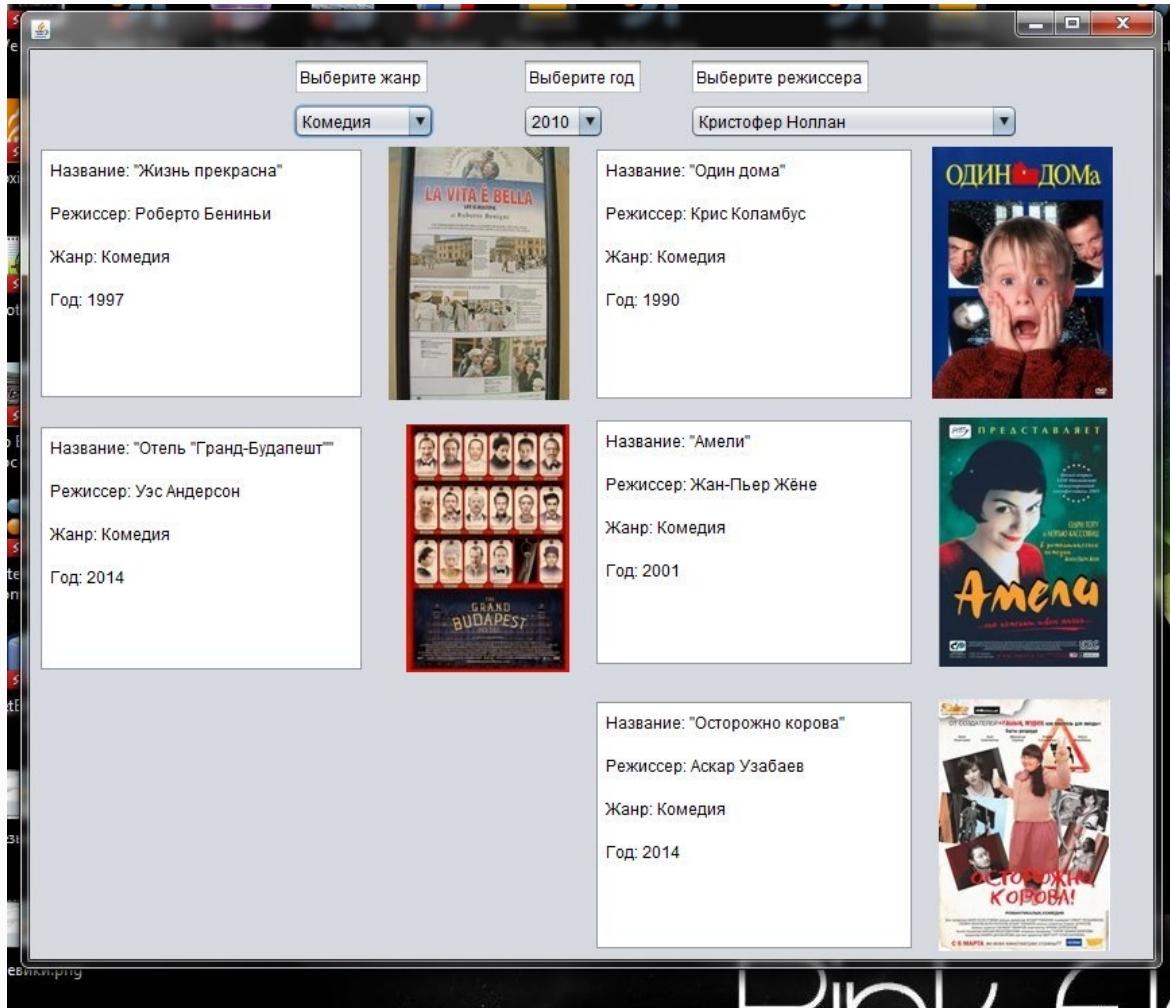
2. User Registration / Login

Java, GUI application

1. Generate an arbitrary password P Length 8 for example P=Pj6[iX_9]
2. Take the machine time in miles seconds as salt for example S=1478007431
3. PS= P+S=Pj6[iX_91478007431]
4. Use hash function get hash value (Message digest MD5) MD5(PS)->h
5. Save the salt and hash in the file
6. Verifying, enter id, enter the password generated by the given password method, and when we press the password, a message is displayed „Login successful“, or „User doesn't exist“, Password is incorrect



Project #6



2. Movie Recommender System

Java, GUI application

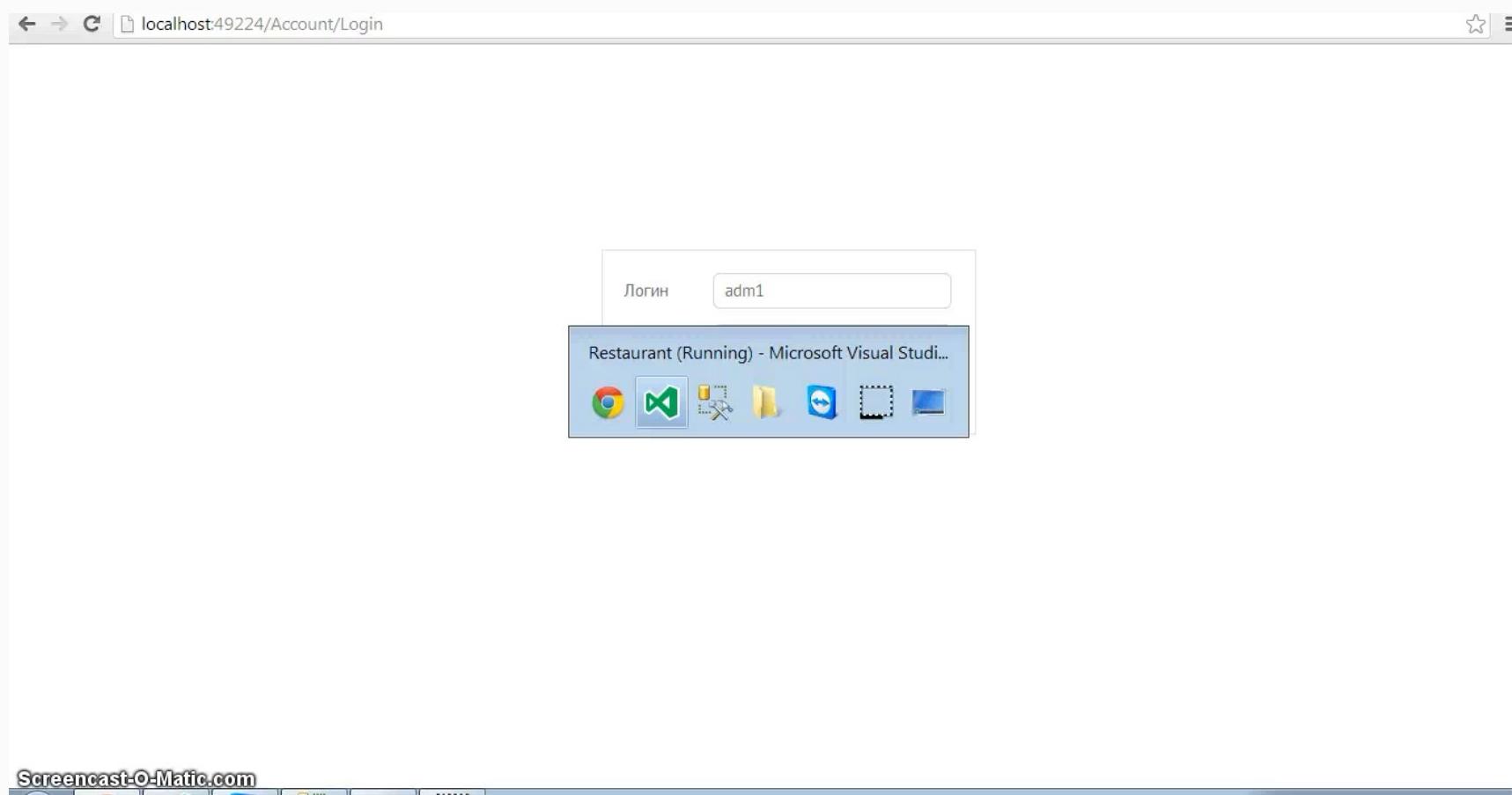
GUI application filtering by genres, film directors and countries separately.

The user selects a certain genre, then GUI application displays a film of this genre only or selects a director displays films with this director, or selects which country displays films from this country, i.e., displays films on request



Project #7

Restaurant Web System



Project #7

Restaurant Web System

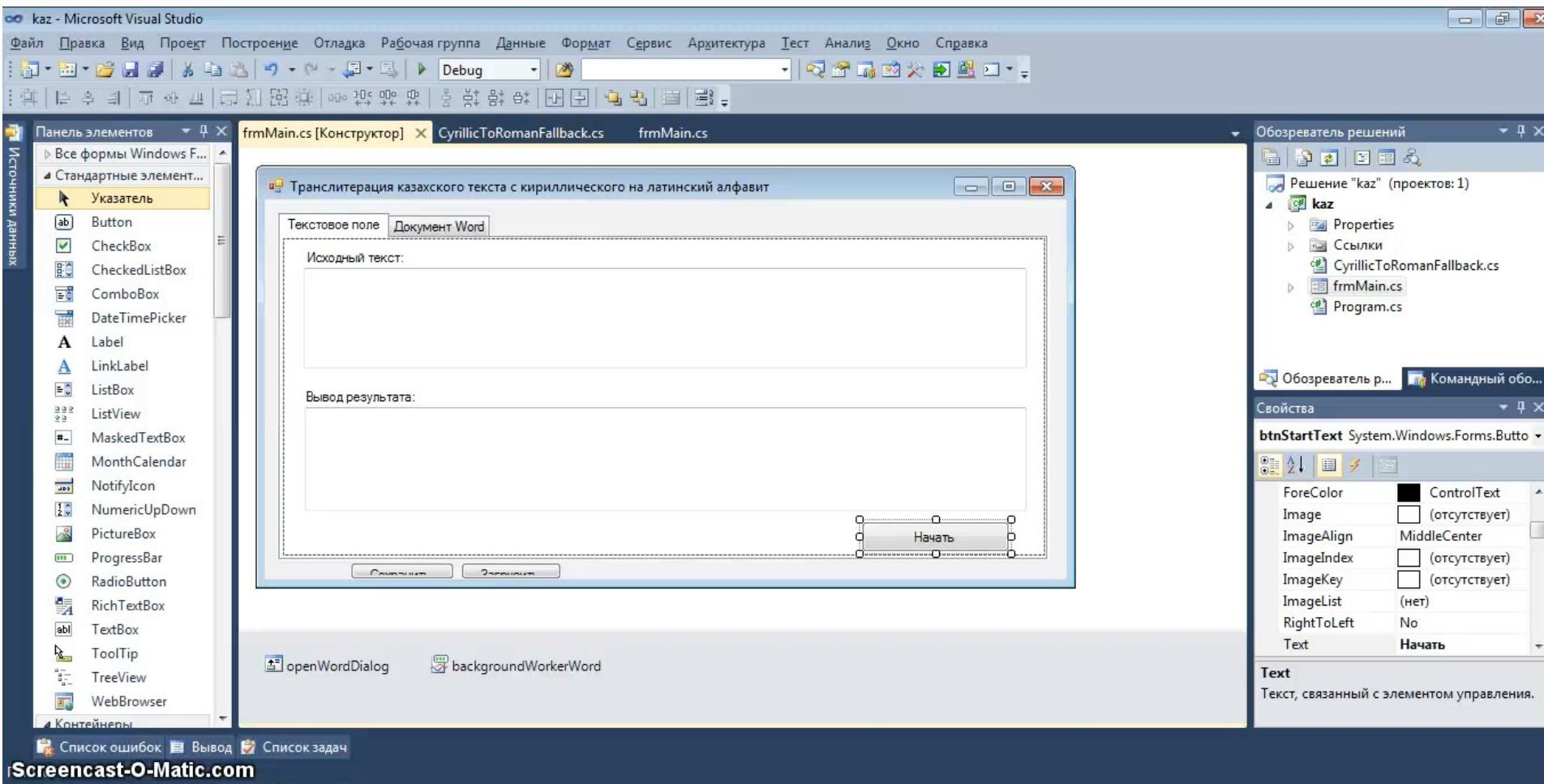
HTML, PHP, SQL

Restaurant Web Application have Login panel. Activity tab has pages Tables and Waiters. Tables page has columns: Name (Table №1, Table №2 and etc.), Orders, Food preparing, Table decoration, Paid. Tables possible to see separately. Inside of each table existing such columns as Name of dish, Quantity, Waiter, Time of order. Waiters page has columns: Name of waiters, his Orders, Preparation of food, Table Decoration, Paid.



Project #8

Kazakh language – Latin symbols transliteration system



Project #8

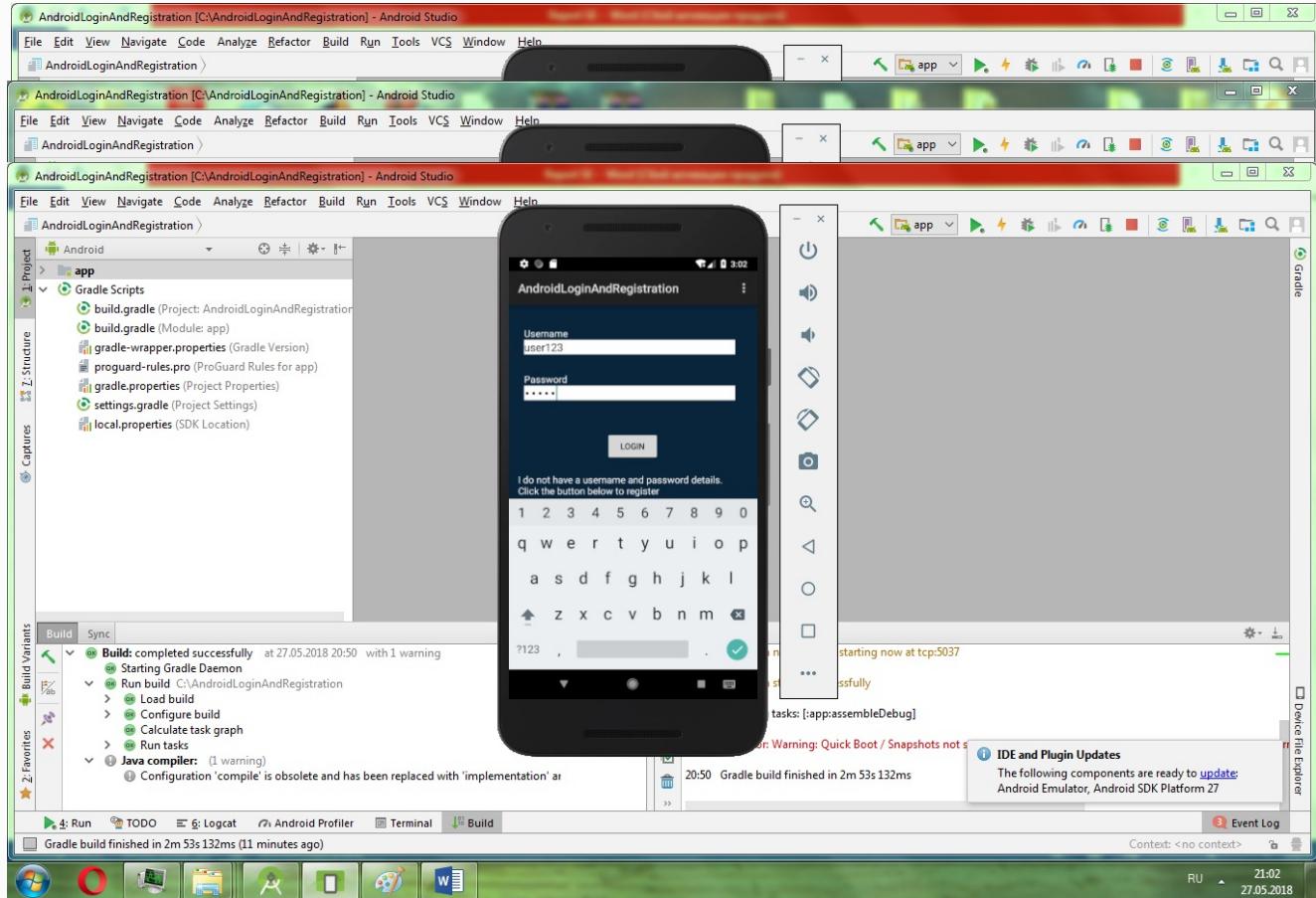
Kazakh language – Latin symbols transliteration system

HTML, ASP.NET, C#

WEB application allows translate text in Kazakh language to Latin symbols. And this WEB application have opportunity to upload file with text in Kazakh language and translate, all text to Latin symbols.



Project #4



2. Android Login Registration

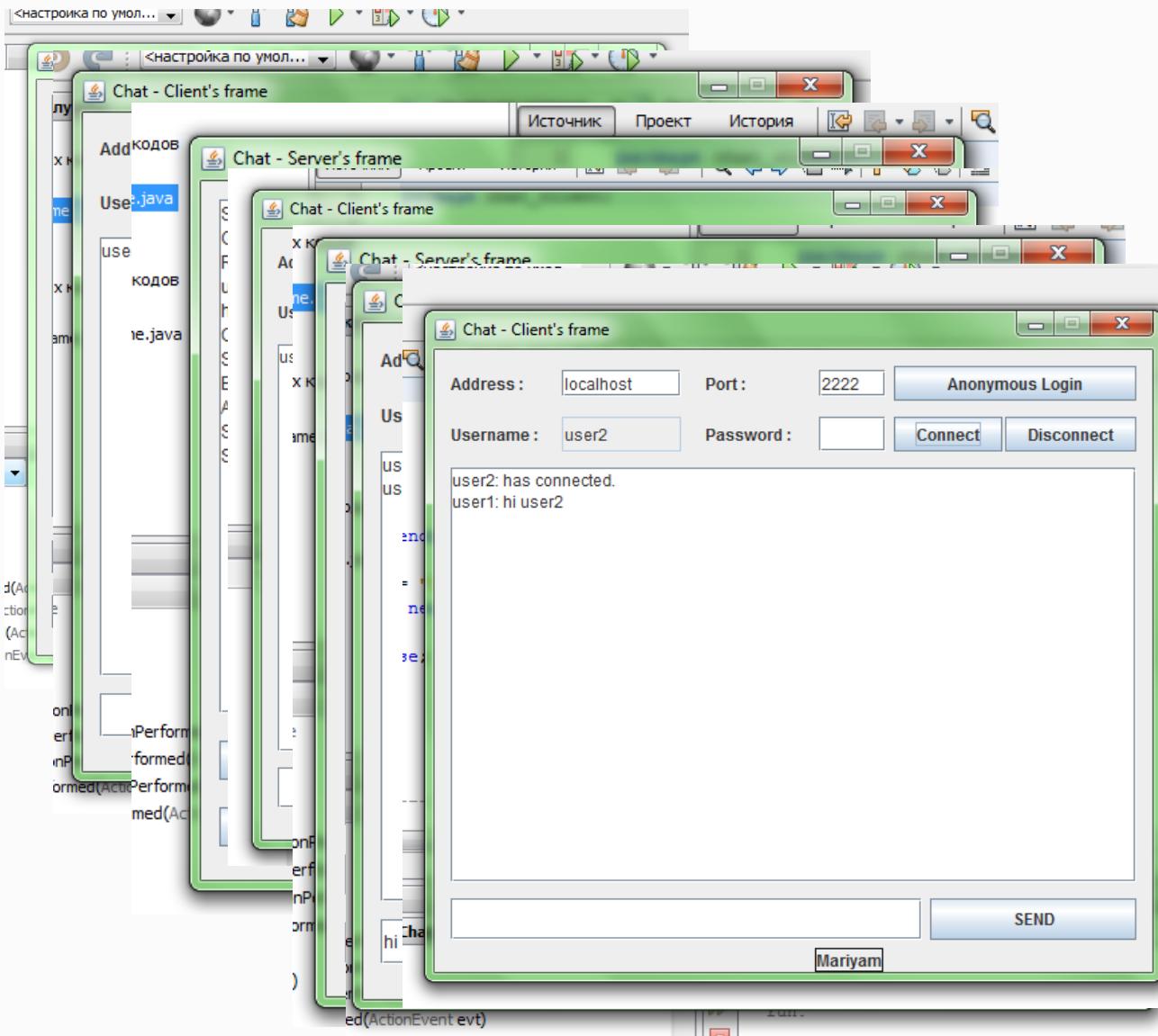
Android Studio, Apache Tomcat, Java PHP, MySQL

Java EE Web application

Steps of architect and design Java/Java EE web application:

- Design your database/entities first
- Use libraries sensibly and judiciously.
- Test application on all major browsers
- Select the application server based on its capabilities and more importantly 'your needs'. In this course was used Apache Tomcat server.
- Use JPA interfaces
- Never abuse HttpSession.
- Keep entities Serializable. Enforce developers to use `toString()`, `hashCode()` and `equals()`

Project #4



2. Client – Server

Java GUI

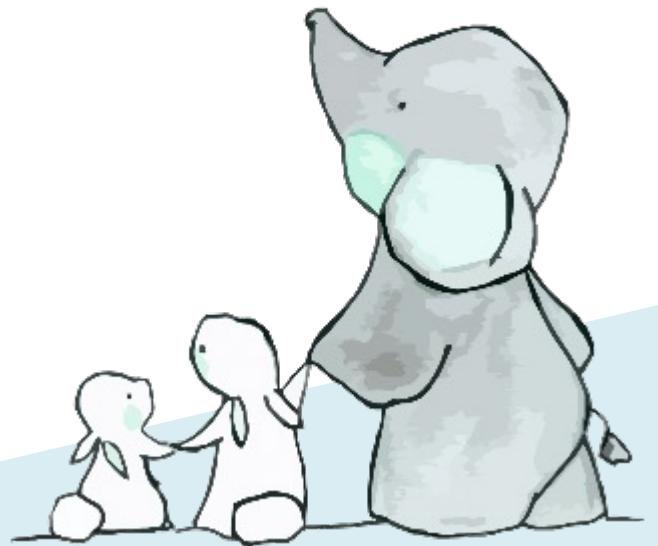
1. Server is starting
2. Connection of user 1
3. Addition to server of user 1
4. Connection of user 2
5. Addition to server of user 2
6. Sending message of user 1 to user 2
7. Receiving message of user 1 to user 2



03

Software projects

during professional
experience





研究成果



(1) Administration of CMS Moodle

(2) Fixing Login/Logout

(3) Installation of Moodle

(4) Working with plugins

(5) Create courses

(6) Create tests

The screenshot shows a Moodle course page titled 'WEB technologies I' by Marivam Mukhimbayeva. The page includes a sidebar with navigation links like Participants, Badges, Competencies, Grades, General, and weeks 1 through 9. A 'Final Test' section is visible, showing a checkbox labeled 'Mark as done'. The main content area lists weekly topics: Week 1, Week 2, Week 3, Week 4, Week 5 (Midterm), Week 6, and Week 7.





研究成果



- (1) Administration of CMS DataLife Engine DLE
- (2) Uploading content to website
- (3) Changing backgrounds
- (4) Writing posts
- (5) Technical support of web-sites
- (6) Creating of dynamic web-pages

ELnews ақпараттық портала

KZ RU

«Издеу»

Facebook Twitter Telegram Instagram WhatsApp

EL-жаңалық Саясат Қоғам Әлем Экономика Мәдениет Спорт Мультимедиа Технология

Жаңалықтар

16 қазан, 17:21 672 EL-жаңалық «Менің Қазақстаным» халықаралық музыка чөллендік аяқталды

18 мамыр, 10:19 1 230 EL-жаңалық Танымал журналист Бейсен Құранбек өмірден етті

14 мамыр, 10:04 918 EL-жаңалық Қазақстандықтар 18 мамырдан бастап мешітке бара алады

14 мамыр, 09:33 909 EL-жаңалық Қазақстанда еткен тауілкіт 154 адам коронавирус індітімен ауырган

11 мамыр, 13:39 1 182 Басты Қасым-Жомарт Тоқаев карантин шектеулеріне қатысты мәлімдеме жасады

05 мамыр, 16:20 1 579 EL-жаңалық Жастар оқу бітіргеннен кейін үш жыл ауылда жұмыс істейді

Фото

16 қазан, 17:21 672 EL-жаңалық «Менің Қазақстаным» халықаралық музыка чөллендік аяқталды

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Сұхбат

Әлеуметтік желі

Twitter

Твиттер от @el_newskz

ELnews @el_newskz

Завершился международный музыкальный членник "Менің Қазақстаным" » ELnews elnews.kz/novosti/1209-z...



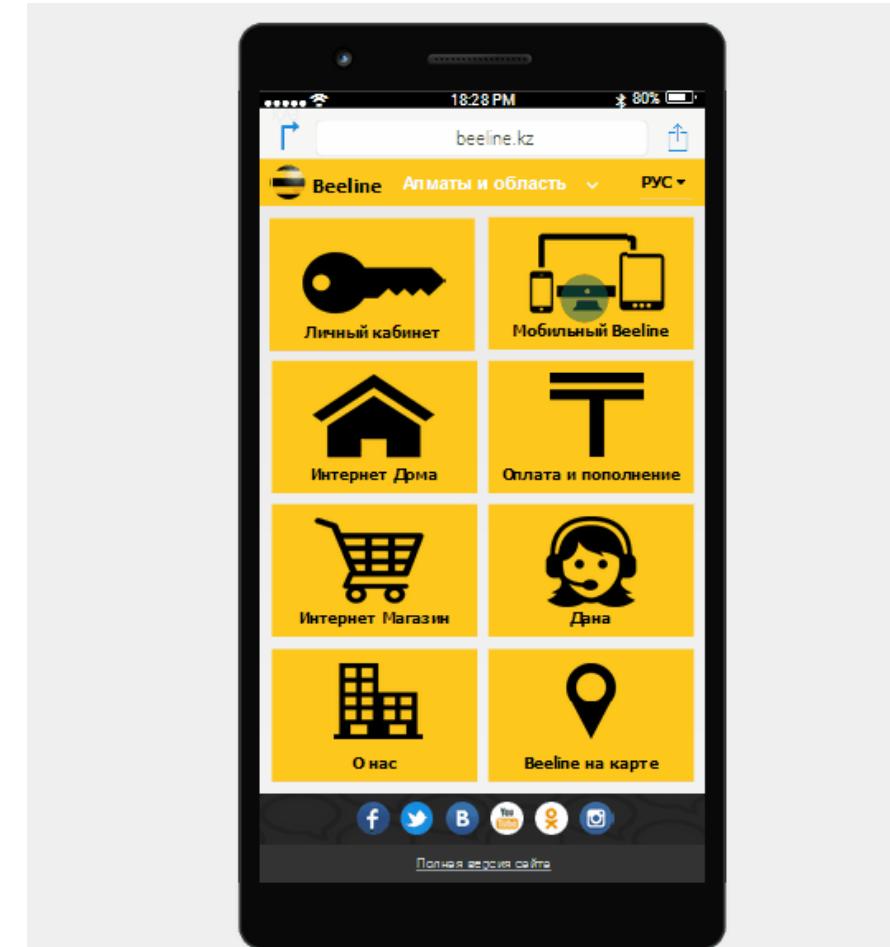


研究成果



Beeline™

- (1) UI/UX test
- (2) Development of mobile app prototype
- (3) Development of mobile website prototype
- (4) Work with JustinMind
- (5) Graphical design





研究成果



SAMSUNG MEDISON

- (1) Design of uzi.kz website
- (2) Design of samsungmedison.kz website
- (3) Graphical design
- (4) Writing articles
- (5) Uploading of content
- (6) Installation of plugins



звуковой диагностики

ТЫ PROVISO

тане и Таджикистане

МАРТ 2016



ЧТ ПТ СБ ВС

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24	25	26	27
31	1	2	3



ия администрации сайта.

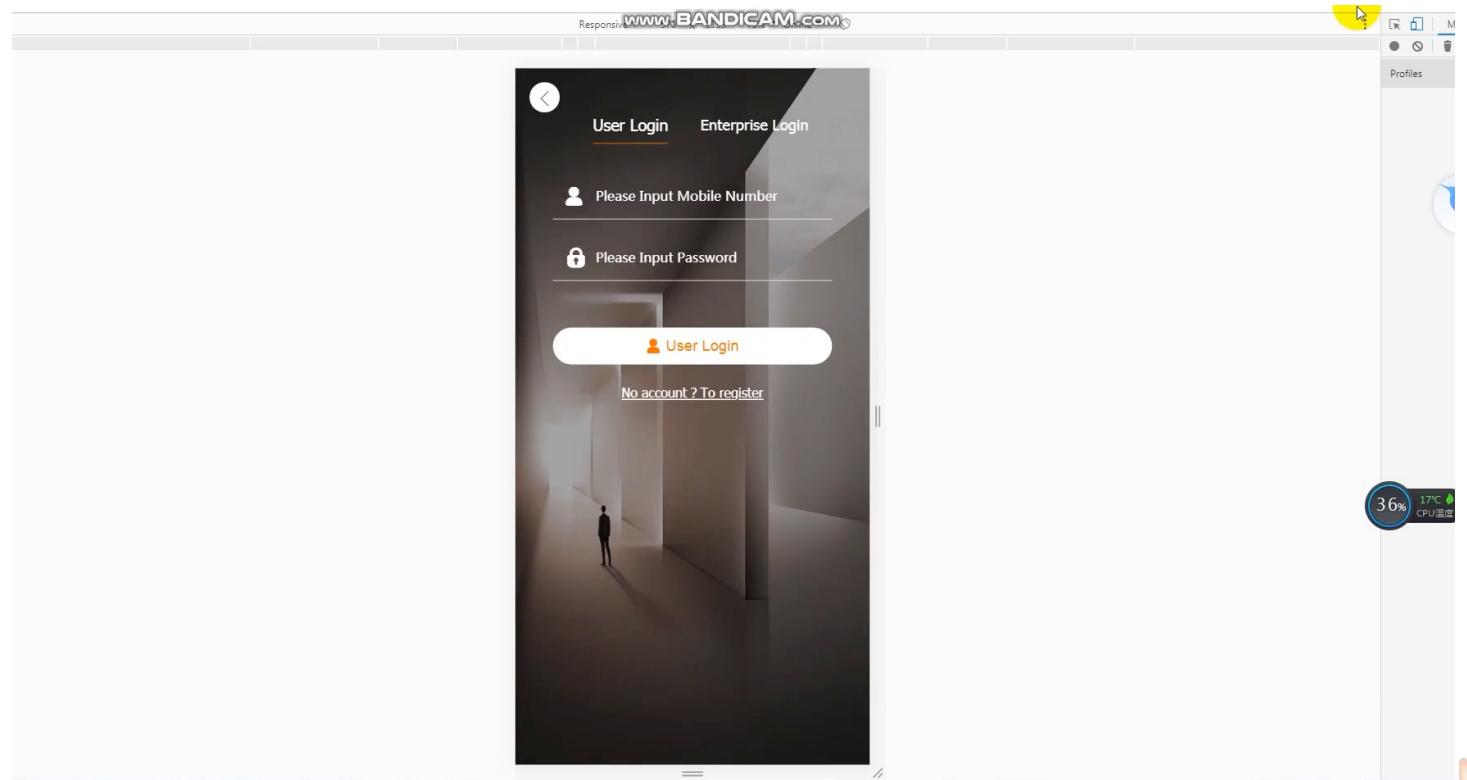




研究成果

Yu Ding Yu Tech.

- (1) Administration of online shops
- (2) Create video instructions
- (3) Create content for websites
- (4) Writing documentation manual for users of websites
- (5) Manage and tech.support of websites





研究成果



- (1) Teach web-technologies
- (2) Checking assignments
- (3) Upload lectures/tasks on Moodle system
- (4) Give materials about HTML, CSS JS, PHP, Vue.js, Laravel
- (5) Record grades

The image shows a desktop environment with several open browser windows. At the top, a window titled 'Li Alexandra' displays a file path in the address bar: 'C:/Users/Мариям/Documents/2020%20-%202021/Web%20technologies/All/Assign...'. Below it, another window shows a file explorer with 'TodoApp.vue' and 'main.js' files. A third window shows a table of data with columns like 'id', 'name', 'email', 'phone', and 'status'. The bottom-most window is a Twitter-like application showing tweets from users like Steph Dietz, Elon Musk, and Kevin Hart. To the right of the browser windows, there's a sidebar with 'APERIO' branding and a cartoon illustration of a woman in a blue dress and a small brown rabbit.





04

References



References

GitHub

<https://github.com/mmariyam>



Behance

https://www.behance.net/mariyam_mukhum

Thanks!

