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| МИНОБРНАУКИ РОССИИ | | |
| Федеральное государственное бюджетное образовательное учреждение  высшего образования  **«МИРЭА – Российский технологический университет»**  **РТУ МИРЭА** | | |
| Институт информационных технологий | | |
| Кафедра вычислительной техники | | |

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**КУРСОВАЯ РАБОТА**

по дисциплине\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(наименование дисциплины)

**Тема курсовой работы**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**Студент группы**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(учебная группа, фамилия, имя отчество, студента) (подпись студента)

**Руководитель курсовой работы**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(должность, звание, ученая степень) (подпись руководителя)

**Рецензент** (при наличии)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(должность, звание, ученая степень) (подпись рецензента)

Работа представлена к защите «\_\_\_\_»\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_20\_\_\_г.

Допущен к защите «\_\_\_\_\_»\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_20\_\_\_г.

Москва 2018 г.

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| МИНОБРНАУКИ РОССИИ | | |
| Федеральное государственное бюджетное образовательное учреждение  высшего образования  **«МИРЭА – Российский технологический университет»**  **РТУ МИРЭА** | | |
| Институт информационных технологий | | |
| Кафедра вычислительной техники | | |

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| **Утверждаю** | |
| Заведующий кафедрой |  |
|  | *Подпись* |
| Платонова О.В. | |
| *ФИО* | |
| «\_\_\_\_» \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 20\_\_ г. | |

**ЗАДАНИЕ**

**на выполнение курсовой работы** по дисциплине

«\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_»

Студент\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Группа\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| **Тема:** |  |
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**Исходные данные:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Перечень вопросов, подлежащих разработке, и обязательного графического материала:\_\_\_\_\_\_\_\_\_\_\_\_**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Срок представления к защите курсового проекта(работы): до «\_\_\_»\_\_\_\_\_\_\_\_\_\_\_\_20\_\_\_г.**

**Задание на курсовую работу выдал**  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)

*Подпись руководителя Ф.И.О. руководителя*

**Задание на курсовую работу получил** «\_\_\_»\_\_\_\_\_\_\_\_\_\_20\_\_\_\_г

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)

*Подпись обучающегося* Ф.И.О. исполнителя

Москва 20\_\_ г.

**Проблема**

Разработать зоомагазин.

**Задача**

Разработать масштабируемое и слабосвязанное spring-приложение с микросервисной REST архитектурой с использованием хранилища конфигурации и авторизацией пользователя, которое бы являлось backend-сервисом для зоомагазина.

**Решение**

Была проанализирована задача, разработана микросервисная архитектура приложения и написан код на языке Java с использованием сторонних библиотек.

**Анализ результатов**

Логи покупки животного и общения между микросервисами в целевой программе:

===========================request begin================================================

2019-01-27 15:04:06.584 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : URI : {}http://localhost:8081/balance

2019-01-27 15:04:06.584 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Method : {}GET

2019-01-27 15:04:06.584 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Headers : {}{Accept=[application/json, application/\*+json], Content-Length=[0], Authorization=[Bearer MSBhZG1pbg==.ZTdkYjU5YjI0YmZhYjM2ZmY2MzQ2M2FhZGI0OTViZWQyNjk5OTQyNWRlOGE4NzUyOGIwYWRjMGIzZTNiMmQ3OA==]}

2019-01-27 15:04:06.584 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Request body: {}

2019-01-27 15:04:06.584 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : ==========================request end================================================

2019-01-27 15:04:06.596 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : ============================response begin==========================================

2019-01-27 15:04:06.596 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Status code : {}200

2019-01-27 15:04:06.596 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Status text : {}null

2019-01-27 15:04:06.596 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Headers : {}{Content-Type=[application/json;charset=UTF-8], Transfer-Encoding=[chunked], Date=[Sun, 27 Jan 2019 12:04:06 GMT]}

2019-01-27 15:04:06.597 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Response body: {}[{"id":1,"user\_id":1,"val":100},{"id":2,"user\_id":2,"val":200}]

2019-01-27 15:04:06.597 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : =======================response end=================================================

2019-01-27 15:04:06.606 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : ===========================request begin================================================

2019-01-27 15:04:06.607 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : URI : {}http://localhost:8081/balance/1

2019-01-27 15:04:06.607 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Method : {}GET

2019-01-27 15:04:06.607 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Headers : {}{Accept=[application/json, application/\*+json], Content-Length=[0], Authorization=[Bearer MSBhZG1pbg==.ZTdkYjU5YjI0YmZhYjM2ZmY2MzQ2M2FhZGI0OTViZWQyNjk5OTQyNWRlOGE4NzUyOGIwYWRjMGIzZTNiMmQ3OA==]}

2019-01-27 15:04:06.607 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Request body: {}

2019-01-27 15:04:06.607 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : ==========================request end================================================

2019-01-27 15:04:06.640 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : ============================response begin==========================================

2019-01-27 15:04:06.640 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Status code : {}200

2019-01-27 15:04:06.640 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Status text : {}null

2019-01-27 15:04:06.640 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Headers : {}{Content-Type=[application/json;charset=UTF-8], Transfer-Encoding=[chunked], Date=[Sun, 27 Jan 2019 12:04:06 GMT]}

2019-01-27 15:04:06.640 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Response body: {}{"id":1,"user\_id":1,"val":100}

2019-01-27 15:04:06.640 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : =======================response end=================================================

2019-01-27 15:04:06.647 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : ===========================request begin================================================

2019-01-27 15:04:06.647 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : URI : {}http://localhost:8086/pet/

2019-01-27 15:04:06.647 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Method : {}GET

2019-01-27 15:04:06.647 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Headers : {}{Accept=[application/json, application/\*+json], Content-Length=[0], Authorization=[Bearer MSBhZG1pbg==.ZTdkYjU5YjI0YmZhYjM2ZmY2MzQ2M2FhZGI0OTViZWQyNjk5OTQyNWRlOGE4NzUyOGIwYWRjMGIzZTNiMmQ3OA==]}

2019-01-27 15:04:06.647 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Request body: {}

2019-01-27 15:04:06.647 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : ==========================request end================================================

2019-01-27 15:04:06.979 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : ============================response begin==========================================

2019-01-27 15:04:06.979 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Status code : {}200

2019-01-27 15:04:06.979 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Status text : {}null

2019-01-27 15:04:06.979 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Headers : {}{Content-Type=[application/json;charset=UTF-8], Transfer-Encoding=[chunked], Date=[Sun, 27 Jan 2019 12:04:06 GMT]}

2019-01-27 15:04:06.981 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Response body: {}[{"id":1,"age":1,"name":"ALEX","price":50},{"id":2,"age":2,"name":"BOB","price":40},{"id":3,"age":1,"name":"JOHN","price":50},{"id":4,"age":2,"name":"TED","price":40}]

2019-01-27 15:04:06.982 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : =======================response end=================================================

2019-01-27 15:04:06.989 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : ===========================request begin================================================

2019-01-27 15:04:06.989 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : URI : {}http://localhost:8084/currency/

2019-01-27 15:04:06.989 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Method : {}GET

2019-01-27 15:04:06.989 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Headers : {}{Accept=[application/json, application/\*+json], Content-Length=[0], Authorization=[Bearer MSBhZG1pbg==.ZTdkYjU5YjI0YmZhYjM2ZmY2MzQ2M2FhZGI0OTViZWQyNjk5OTQyNWRlOGE4NzUyOGIwYWRjMGIzZTNiMmQ3OA==]}

2019-01-27 15:04:06.989 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Request body: {}

2019-01-27 15:04:06.989 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : ==========================request end================================================

2019-01-27 15:04:07.303 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : ============================response begin==========================================

2019-01-27 15:04:07.303 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Status code : {}200

2019-01-27 15:04:07.303 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Status text : {}null

2019-01-27 15:04:07.303 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Headers : {}{Content-Type=[application/json;charset=UTF-8], Transfer-Encoding=[chunked], Date=[Sun, 27 Jan 2019 12:04:07 GMT]}

2019-01-27 15:04:07.306 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Response body: {}[{"id":1,"user\_id":1,"conversion":2.0},{"id":2,"user\_id":2,"conversion":1.0}]

2019-01-27 15:04:07.306 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : =======================response end=================================================

2019-01-27 15:04:07.312 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : ===========================request begin================================================

2019-01-27 15:04:07.312 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : URI : {}http://localhost:8081/balance

2019-01-27 15:04:07.312 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Method : {}GET

2019-01-27 15:04:07.312 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Headers : {}{Accept=[application/json, application/\*+json], Content-Length=[0], Authorization=[Bearer MSBhZG1pbg==.ZTdkYjU5YjI0YmZhYjM2ZmY2MzQ2M2FhZGI0OTViZWQyNjk5OTQyNWRlOGE4NzUyOGIwYWRjMGIzZTNiMmQ3OA==]}

2019-01-27 15:04:07.312 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Request body: {}

2019-01-27 15:04:07.313 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : ==========================request end================================================

2019-01-27 15:04:07.317 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : ============================response begin==========================================

2019-01-27 15:04:07.318 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Status code : {}200

2019-01-27 15:04:07.318 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Status text : {}null

2019-01-27 15:04:07.318 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Headers : {}{Content-Type=[application/json;charset=UTF-8], Transfer-Encoding=[chunked], Date=[Sun, 27 Jan 2019 12:04:06 GMT]}

2019-01-27 15:04:07.318 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Response body: {}[{"id":1,"user\_id":1,"val":100},{"id":2,"user\_id":2,"val":200}]

2019-01-27 15:04:07.318 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : =======================response end=================================================

2019-01-27 15:04:07.323 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : ===========================request begin================================================

2019-01-27 15:04:07.323 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : URI : {}http://localhost:8081/balance/1

2019-01-27 15:04:07.323 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Method : {}GET

2019-01-27 15:04:07.323 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Headers : {}{Accept=[application/json, application/\*+json], Content-Length=[0], Authorization=[Bearer MSBhZG1pbg==.ZTdkYjU5YjI0YmZhYjM2ZmY2MzQ2M2FhZGI0OTViZWQyNjk5OTQyNWRlOGE4NzUyOGIwYWRjMGIzZTNiMmQ3OA==]}

2019-01-27 15:04:07.323 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Request body: {}

2019-01-27 15:04:07.323 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : ==========================request end================================================

2019-01-27 15:04:07.327 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : ============================response begin==========================================

2019-01-27 15:04:07.328 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Status code : {}200

2019-01-27 15:04:07.328 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Status text : {}null

2019-01-27 15:04:07.328 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Headers : {}{Content-Type=[application/json;charset=UTF-8], Transfer-Encoding=[chunked], Date=[Sun, 27 Jan 2019 12:04:06 GMT]}

2019-01-27 15:04:07.328 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Response body: {}{"id":1,"user\_id":1,"val":100}

2019-01-27 15:04:07.328 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : =======================response end=================================================

2019-01-27 15:04:07.339 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : ===========================request begin================================================

2019-01-27 15:04:07.340 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : URI : {}http://localhost:8081/balance/

2019-01-27 15:04:07.340 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Method : {}PUT

2019-01-27 15:04:07.340 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Headers : {}{Content-Type=[application/json;charset=UTF-8], Transfer-Encoding=[chunked], Date=[Sun, 27 Jan 2019 12:04:06 GMT], Content-Length=[29], Authorization=[Bearer MSBhZG1pbg==.ZTdkYjU5YjI0YmZhYjM2ZmY2MzQ2M2FhZGI0OTViZWQyNjk5OTQyNWRlOGE4NzUyOGIwYWRjMGIzZTNiMmQ3OA==]}

2019-01-27 15:04:07.340 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Request body: {}{"id":1,"user\_id":1,"val":55}

2019-01-27 15:04:07.340 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : ==========================request end================================================

2019-01-27 15:04:07.342 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : ============================response begin==========================================

2019-01-27 15:04:07.395 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Status code : {}200

2019-01-27 15:04:07.395 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Status text : {}null

2019-01-27 15:04:07.395 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Headers : {}{Content-Type=[application/json;charset=UTF-8], Transfer-Encoding=[chunked], Date=[Sun, 27 Jan 2019 12:04:06 GMT]}

2019-01-27 15:04:07.396 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : Response body: {}55

2019-01-27 15:04:07.396 INFO 13116 --- [nio-8082-exec-3] mirea.logger.CustomLogger : =======================response end=================================================

2019-01-27 15:04:07.428 INFO 13116 --- [nio-8082-exec-4] mirea.logger.AuthFilter : Successful token verification.

2019-01-27 15:04:07.429 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : ===========================request begin================================================

2019-01-27 15:04:07.429 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : URI : {}http://localhost:8081/balance

2019-01-27 15:04:07.429 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : Method : {}GET

2019-01-27 15:04:07.429 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : Headers : {}{Accept=[application/json, application/\*+json], Content-Length=[0], Authorization=[Bearer MSBhZG1pbg==.ZTdkYjU5YjI0YmZhYjM2ZmY2MzQ2M2FhZGI0OTViZWQyNjk5OTQyNWRlOGE4NzUyOGIwYWRjMGIzZTNiMmQ3OA==]}

2019-01-27 15:04:07.429 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : Request body: {}

2019-01-27 15:04:07.429 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : ==========================request end================================================

2019-01-27 15:04:07.436 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : ============================response begin==========================================

2019-01-27 15:04:07.436 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : Status code : {}200

2019-01-27 15:04:07.436 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : Status text : {}null

2019-01-27 15:04:07.436 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : Headers : {}{Content-Type=[application/json;charset=UTF-8], Transfer-Encoding=[chunked], Date=[Sun, 27 Jan 2019 12:04:06 GMT]}

2019-01-27 15:04:07.437 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : Response body: {}[{"id":1,"user\_id":1,"val":55},{"id":2,"user\_id":2,"val":200}]

2019-01-27 15:04:07.437 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : =======================response end=================================================

2019-01-27 15:04:07.442 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : ===========================request begin================================================

2019-01-27 15:04:07.442 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : URI : {}http://localhost:8081/balance/1

2019-01-27 15:04:07.442 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : Method : {}GET

2019-01-27 15:04:07.443 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : Headers : {}{Accept=[application/json, application/\*+json], Content-Length=[0], Authorization=[Bearer MSBhZG1pbg==.ZTdkYjU5YjI0YmZhYjM2ZmY2MzQ2M2FhZGI0OTViZWQyNjk5OTQyNWRlOGE4NzUyOGIwYWRjMGIzZTNiMmQ3OA==]}

2019-01-27 15:04:07.443 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : Request body: {}

2019-01-27 15:04:07.443 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : ==========================request end================================================

2019-01-27 15:04:07.447 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : ============================response begin==========================================

2019-01-27 15:04:07.447 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : Status code : {}200

2019-01-27 15:04:07.447 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : Status text : {}null

2019-01-27 15:04:07.447 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : Headers : {}{Content-Type=[application/json;charset=UTF-8], Transfer-Encoding=[chunked], Date=[Sun, 27 Jan 2019 12:04:06 GMT]}

2019-01-27 15:04:07.447 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : Response body: {}{"id":1,"user\_id":1,"val":55}

2019-01-27 15:04:07.447 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : =======================response end=================================================

2019-01-27 15:04:07.453 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : ===========================request begin================================================

2019-01-27 15:04:07.453 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : URI : {}http://localhost:8086/pet/

2019-01-27 15:04:07.453 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : Method : {}GET

2019-01-27 15:04:07.453 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : Headers : {}{Accept=[application/json, application/\*+json], Content-Length=[0], Authorization=[Bearer MSBhZG1pbg==.ZTdkYjU5YjI0YmZhYjM2ZmY2MzQ2M2FhZGI0OTViZWQyNjk5OTQyNWRlOGE4NzUyOGIwYWRjMGIzZTNiMmQ3OA==]}

2019-01-27 15:04:07.453 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : Request body: {}

2019-01-27 15:04:07.453 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : ==========================request end================================================

2019-01-27 15:04:07.458 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : ============================response begin==========================================

2019-01-27 15:04:07.458 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : Status code : {}200

2019-01-27 15:04:07.458 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : Status text : {}null

2019-01-27 15:04:07.458 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : Headers : {}{Content-Type=[application/json;charset=UTF-8], Transfer-Encoding=[chunked], Date=[Sun, 27 Jan 2019 12:04:06 GMT]}

2019-01-27 15:04:07.458 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : Response body: {}[{"id":1,"age":1,"name":"ALEX","price":50},{"id":2,"age":2,"name":"BOB","price":40},{"id":3,"age":1,"name":"JOHN","price":50},{"id":4,"age":2,"name":"TED","price":40}]

2019-01-27 15:04:07.458 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : =======================response end=================================================

2019-01-27 15:04:07.466 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : ===========================request begin================================================

2019-01-27 15:04:07.466 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : URI : {}http://localhost:8084/currency/

2019-01-27 15:04:07.466 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : Method : {}GET

2019-01-27 15:04:07.466 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : Headers : {}{Accept=[application/json, application/\*+json], Content-Length=[0], Authorization=[Bearer MSBhZG1pbg==.ZTdkYjU5YjI0YmZhYjM2ZmY2MzQ2M2FhZGI0OTViZWQyNjk5OTQyNWRlOGE4NzUyOGIwYWRjMGIzZTNiMmQ3OA==]}

2019-01-27 15:04:07.466 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : Request body: {}

2019-01-27 15:04:07.466 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : ==========================request end================================================

2019-01-27 15:04:07.471 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : ============================response begin==========================================

2019-01-27 15:04:07.471 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : Status code : {}200

2019-01-27 15:04:07.471 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : Status text : {}null

2019-01-27 15:04:07.471 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : Headers : {}{Content-Type=[application/json;charset=UTF-8], Transfer-Encoding=[chunked], Date=[Sun, 27 Jan 2019 12:04:07 GMT]}

2019-01-27 15:04:07.471 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : Response body: {}[{"id":1,"user\_id":1,"conversion":2.0},{"id":2,"user\_id":2,"conversion":1.0}]

2019-01-27 15:04:07.472 INFO 13116 --- [nio-8082-exec-4] mirea.logger.CustomLogger : =======================response end=================================================

2019-01-27 15:04:07.483 INFO 13116 --- [nio-8082-exec-5] mirea.logger.AuthFilter : Successful token verification.

**Выводы**

В результате выполнения лабораторной работы было получено решение поставленной задачи. Была написана программа позволяющая продавать питомцев и товары для них. Получены знания об архитектуре клиент-серверных приложений и основные подходы для их создания на высокоуровневом языке.