**Projekt-Documentation**

**Projectname:** Lead Management System  
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**Startdate:** 02.03.2025

**1. Vision**

The goal of the project is to develop a Lead Management System that allows leads to be created, updated, deleted, and converted into customers.  
The system should provide a simple user interface, JWT authentication, and CRUD functions.

**2. Product Backlog**

| **Number** | **Must/Can** | **Category** | **Description** | **Priority** |
| --- | --- | --- | --- | --- |
| **1** | Must | Functional | Lead create | High |
| **2** | Must | Functional | Lead update | High |
| **3** | Must | Functional | Lead delete | High |
| **4** | Must | Functional | Lead view | High |
| **5** | Must | Functional | Lead to customer | High |
| **6** | Must | Functional | Customer update | High |
| **8** | Must | Functional | View customer | High |
| **9** | Can | Quality | JWT Token Auth | Low |
| **10** | Must | Presentation | UI Design + Presentation | High |

**3. Architecture**

**Tech Stack**

* **Backend: C#**
* **Database: MySQL**
* **Authentication: JWT Token**

**4. Sprint Planung**

**Sprint 1 (02.03.2025 – 03.03.2025)**

**Goal:**

* Create Datbase
* CRUD-Function Create
* CRUD- Function View
* Check connection between backend → database

**Tasks:**

| **Task** | **Status** | **Reason** | **Problems** | **Solution** |
| --- | --- | --- | --- | --- |
| **Database Setup** | Done | Project foundation | None |  |
| **CRUD Create Function** | Done | No tests possible without create function | API connected with UI | Research + examples |
| **CRUD View Function** | Done | Validate & display data | None |  |

**Retrospektive Sprint 1**

| **Question** | **Answer** |
| --- | --- |
| **What went well?** | Database connection works, CRUD Create tested and confirmed in database and CRUD View. |
| **Biggest problem?** | Connecting with UI took longer than expected to create and test CRUD functions. |
| **What can I improve?** | Plan more time for research. |
| **Next steps:** | Build update and delete functions. |

**5. Sprint 2 (04.03.2025 – 05.03.2025)**

**Goal:**

* Create CRUD **Update function**
* Create CRUD **Delete function**

**Tasks:**

| **Task** | **Status** | **Reason** | **Problems** | **Solution** |
| --- | --- | --- | --- | --- |
| **CRUD Update Function** | Done | Update leads | Update a lead with Id | Research and using of breakpoints |
| **CRUD Delete Function** | Done | Delete leads | None |  |

**Retrospektive Sprint 2**

|  |  |
| --- | --- |
| **What went well?** | Creating the CRUD function and successfully updating data in an update request. |
| **Biggest problem?** | What was the biggest problem?The request never accepted the ID. |
| **What can I improve?** | Working more with breakpoints. |
| **Next steps:** | Implement the Lead to Customer function and all Customer functions. |

**6. Sprint 3 (06.03.2025 – 07.03.2025)**

**Goal:**

* CRUD **Update Customer**
* CRUD **Delete Customer**
* CRUD **View Customer**
* LeadtoCustomer

**Tasks:**

| **Task** | **Status** | **Reason** | **Problems** | **Solution** |
| --- | --- | --- | --- | --- |
| **CRUD Update Customer Function** | Done | Update customers | None |  |
| **CRUD Delete Customer Function** | Done | Delete customers | None |  |
| **CRUD View Customer Function** | Done | View customers | None |  |
| LeadtoCustomer | Done | To transfers lead to customers | How to transfer the leads to the customer database | With researching on the internet and using breakpoints to see what the code is doing |

**Retrospektive Sprint 2**

|  |  |
| --- | --- |
| **What went well?** | Creating the other CRUD functions for Customers |
| **Biggest problem?** | Transferring the lead to the customer database |
| **What can I improve?** | More research on the internet |
| **Next steps:** | Add JWT Token and create presentation |

**6. Sprint 3 (06.03.2025 – 07.03.2025)**

**Ziele:**

* Add JWT Token
* Create Roles
* Presentation
* LeadtoCustomer

**Tasks:**

| **Task** | **Status** | **Reason** | **Problems** | **Solution** |
| --- | --- | --- | --- | --- |
| **CRUD JWt Authertaiton** | Done | That not every one can use costumer function | None |  |
| **prasentation** | In work | Present my work i have done | None |  |

**Retrospektive Sprint 2**

|  |  |
| --- | --- |
| **What went well?** | Creating the different Roles for using the Costumers function |
| **Biggest problem?** | Creating the JWT Token an dhow use it in Swagger UI |
| **What can I improve?** | Try more to research what the Problem is the Code to solve the problem |
| **Next steps:** | Finish presentation and documentation |

**7. Decisions**

| **Date** | **Topic** | **Decision** | **Reason** | **Alternative** |
| --- | --- | --- | --- | --- |
| 02.03.2025 | Database | MySQL | Fast & flexible | PostgreSQL |
| 03.03.2025 | Authentication | JWT | Simple & secure | Session Tokens |
| 08.03.2025 | Roles | Viewer,Editor,Admin | Better use for JWT | - |