Michael Oberwasserlechner

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WORK EXPERIENCE

PREWAVE GMBH - WIEN, AUSTRIA

Website https://www.prewave.com/

FREELANCE KOTLIN FULLSTACK DEVELOPER - 11/2024 - CURRENT

Supply Chain Risk and Sustainability

Returning once again I worked on integrations like **Rapid Ratings**. Beside the technical part a large part was building trust with customers and working on improving their requirements and data quality along the way.

Used frameworks, techniques and tools

Kotlin 2, Java 21, **Spring Boot 3.5**, Ktor 2.3, **Keycloak**, Jooq, Flyway, Liquibase, Argo (Kubernetes), **Google Cloud Platform**, Docker Compose, Postgres 17, Github, Bitbucket, Jira, Confluence, Intellij Idea, Postman, Insomnia, Slack

Responsibilities

- Implement microservice for data provider like Rapid Ratings
- · Requirements engineering with customers
- Communicate Clean Code and Behavior Driven Design principals
- Support the team with knowledge and experience

UNIVERSITÄT FÜR BODENKULTUR – WIEN, AUSTRIA

Business or Sector Education | **Department** Institute for Chemical and Energy Engineering |

Website https://sri-austria2.boku.ac.at/

FREELANCE FRONTEND DEVELOPER - 06/2025 - 06/2025

SRI Visualization and Reporting Web App

Developed a multi-language web application based on a research paper from an SRI (Smart Readiness Indicator) demo project. The application allows users to input building energy data, visualize computed SRI results in interactive charts, and download results in an Excel format for further analysis.

Key Responsibilities:

- Full-stack development of the application
- Requirements engineering and technical scoping
- Integration of data visualization and Excel export features
- Implementation of multi-language support for international usability

Used frameworks, techniques and tools

Angular 19, Excel JS, Chart.js, Github

PREWAVE GMBH – WIEN, AUSTRIA

Website https://www.prewave.com/

FREELANCE KOTLIN DEVELOPER - 02/2024 - 07/2024

Supply Chain Risk and Sustainability

Returning to the this scale-up I worked on multiple integrations of data providers like **BvD** (Companies, Matching), **Coupa** (Easy Forms), **SAP Ariba** (Supplier, Risk, Contracts), **Coface** (Matching). Beside the technical part a large part was building trust with customers and working on improving their requirements and data quality along the way.

Used frameworks, techniques and tools

Kotlin 2, Java 21, **Spring Boot 3.3, Ktor 2.3, Jooq**, Flyway, Liquibase, **Argo** (Kubernetes), **Google Cloud Platform**, Postgres 12 & 15, Bitbucket, Jira, Confluence, Intellij Idea, Postman, Insomnia, Slack

Responsibilities

- Implement microservice for data provider like BvD, SAP Ariba, Coupa, Coface
- · Requirements engineering with customers
- Communicate Clean Code and Behavior Driven Design principals
- Support the team with knowledge and experience

Ⅲ CONET ISB GMBH – KARLSRUHE, GERMANY

Website https://www.conet-isb.de

FREELANCE FULLSTACK JAVA DEVELOPER - 07/2022 - 10/2023

System Development for eGovernment

Feature development for more than 10 applications, macro-services and libraries supporting an eGovernment platform. Those systems ranged from state-of-the-art Spring Boot services with Angular 15 frontends to a very large legacy system based on EJB 2.x and Struts. As part of a high performing Scrum team (7-10 people) I was able to improve my social skills in giving reviews and discussing solutions further and especially liked the high quality reviews I received myself.

Used frameworks, techniques and tools:

Elasticsearch, Java 11, Spring Boot 2.7.x, **Angular** 11-**15**, JUnit 5, Postgres 9.6, Liquibase, Maven, Docker, Openshift (Kubernetes), Bitbucket, Jira, Confluence, Intellij Idea, Postman, Zephry Test Suite for Jira, EJB 2.x, Struts

PREWAVE GMBH - VIENNA, AUSTRIA

FREELANCE KOTLIN DEVELOPER - 05/2022 - 06/2022

KSV Bonitätsmonitor Soap Integration

Create a microservice, integrating the **KSV1870 Bonitätsmonitor** (BoMo) **Soap** Webservice to track criteria deterioration and retrieve current data for monitored companies. Create a custom pdf report showing those data in a clear way.

Moreover connect the new microservice to Prewave's main application by introducing new endpoints and database structures so the microservice could be configured on that main application but keeps it loosely coupled.

Used frameworks, techniques and tools:

Kotlin 1.6, Spring Boot 2.7, Spring-WS, **Soap**, JUnit 5, Postgres 12, Flyway, Gradle, Maven, Google Cloud Platform (Kubernetes), Bitbucket, Jira, Confluence, Intellij Idea, Postman

■ AUDI AG / RAREBYTE OG – GERMANY

FREELANCE FULLSTACK JAVA DEVELOPER - 02/2022 - 05/2022

Continuing the initial project with AUDI this work package was all about adding new features, using the latest frameworks and increase test coverage and overall quality of the project.

Frontend:

- Upgrade to Angular 13.x
- Introduce theming and add a dark theme
- Massively improve the UX for large imports by giving better and faster feedback (AgGrid)

Backend:

Upgrade to Spring Boot 2.6.x

- · Unify test classes across services
- Increase jacoco test coverage to 90% across services

III ROYAL VETERINARY COLLEGE – LONDON, UNITED KINGDOM

Website https://www.rvc.ac.uk/

FREELANCE SECURITY CONSULTANT - 01/2022 - 01/2022

Consulting and support for "capacitor-oauth2" software library.

DEUTSCHE BANK / SENACOR TECHNOLOGIES AG – FRANKFURT, GERMANY

FREELANCE FULLSTACK JAVA DEVELOPER – 10/2021 – 01/2022

Application for managing highly complex decision tables

A enterprise web application was crafted to allow users to manage those decision table and approve them following a 4-eye principle.

Beside the ability to create and edit rules of a decision table in a cell-based inline editor, users can also export to Excel, edit there and import it afterward. This is also used for decision table migration from the old system and for transporting changes from stage to production. Multiple user permissions were introduce to give fine grain access to critical parts of the application. In-app notifications on open approval requests let the users know at first glance that there is some work to do.

3rd party workflow applications will access this application's REST API to get the data on their decision tables.

Responsibilities:

- Security: Keycloak integration, In-house Authorization service integration, Resource securing, serverside JWT signature verification using the IDPs public key
- Application layout and base design. Dark and light theme support. Localization
- REST Service architecture
- Presentation of results in stackholder reviews
- Full stack development
- DevOps TeamCity CI and Openshift
- · Communication with technical and specialist customer employees

Used frameworks, techniques and tools:

Angular 12 with Angular Material and **AgGrid** (Light and Dark Theme), Spring Boot 2.5 (Core, Security, Data), Java 11, JUnit 5, **Keycloak** OIDC Integration, **Openshift** (Redhat Enterprise Kubernetes), Oracle and H2, TeamCity CI, Bitbucket, Jira, Confluence, Intellij Idea, Postman

WAUDI AG / RAREBYTE OG - INGOLSTADT / GRAZ

Business or Sector Manufacturing

FREELANCE BACKEND JAVA DEVELOPER - 10/2020 - 09/2021

Rewrite of Java based REST services and migration to the AWS Cloud.

After analyzing the existing solution we decided to rewrite the services with state of the art technology. The old implementation lacked the use of industry standards and did not include tests to ensure function of the mostly self written framework.

While rewriting the customer was heavily involved so we could improve and extend the solution including a management web app (Angular), that can handle all administrative tasks.

Responsibilities:

- Analysis of >5 year old massively fragmented backend solution without any tests
- · Rewrite decision
- AWS infrastructure design and architecture Infrastructure as code
- · Management frontend architecture
- REST Service architecture
- Consulting and requirements engineering

- Full stack development
- DevOps
- Communication with technical and specialist customer employees

Used frameworks, techniques and tools:

Angular 11+ with Angular Material, Spring Boot 2.x (Core, Security, Data), Java 11, JUnit 5, Docker, AWS Cloud (CloudFormation, Elastic Container Service (Fargate), Elastic Container Registry, Route53, CloudFront, S3, SES, SNS, Certificate Manager, RDS (MySQL 8)), Github SCM, Github Actions for CI, Github Packaging for private maven dependencies, Intellij Idea, Postman, HackNPlan

GRAZ UNIVERSITY OF TECHNOLOGY – GRAZ, AUSTRIA

Business or Sector Education

FREELANCE LEAD DEVELOPER – 12/2019 – 08/2021

Internal platform for the digital transformation of document delivery processes.

The university's departments access the platform using SSO (SAML2), upload their documents, give some additional data and have constant feedback on how their delivery is processed.

Moreover, the platform helps archive management to keep track of these deliveries and integrate the data with a specialized software "ActaPro" not intended to be accessible to department users.

Responsibilities:

- Software design and architecture
- Consulting
- Full stack development
- DevOps
- Communication with technical, specialist stuff and end users to get the best solution for all stakeholders

Used frameworks, techniques and tools:

Angular 12+ with Angular Material, Spring Boot 2.x (Core, Security, Data), Docker and Docker Swarm, Nginx, MySQL 8, Github SCM, Github Actions for CI, Github Packaging for private maven dependencies.

Status:

part-time on going

BAWAG P.S.K. / SENACOR TECHNOLOGIES AG - WIEN, AUSTRIA

Business or Sector Financial and insurance activities

FREELANCE LEAD DEVELOPER – 03/2019 – 09/2019

Responsibilities

Application Development

- Application for cashing out money
- Integration with core banking system
- Integration with counter devices like ID scanner, Signature pad
- Coaching a junior developer
- Presentation and communication with customer
- · Preparing tasks and sprints
- Technical Documentation

DevOps

- Manual migration of Bitbucket Cloud repositories (incl. Pull Requests and Comments, clean up hundreds of stale branches) to on premise Gitlab (no direct access possible)
- · Jenkins installation and integration with Gitlab
- Dev Server Setup (Apache)

Tech StackAngular 7, Angular Material, Spring Boot 2.x, Spring Security, JUnit 5, Gradle, Gitlab, Jira, Confluence, Redhat Linux

■ BYTEOWLS SOFTWARE & CONSULTING (OWNER) – AUSTRIA

FOUNDER, SOFTWARE ARCHITECT, DEVELOPER - 10/2017 - 03/2019

Team Conductor

Online club / association / society management platform.

In 2018 I worked up to 90% on this product and launched a multi-language web platform (PWA) running on the AWS cloud, Android and iOS apps, a multi-language product website using WordPress and social media accounts.

Responsibilities

- Idea
- Concept and project management
- Product development
- Marketing
- Support
- Dev Ops

See team-conductor.com for details.

<u>Used frameworks</u>, techniques and tools

Java 8, Spring MVC, Spring Java Config, Spring Security, Spring Boot, OAuth2, SASS, CSS, JSP+JSTL, Thymeleaf, Hibernate 5, Liquibase, MySQL, Gradle, Maven, Git, Intellij IDEA, Jira. Angular 6+, TypeScript, RxJs, Capacitor, XCode 10, Android Studio, Amazon Web Services incl. Elastic Beanstalk, S3, EC2, RDS, EFS, SNS, SES, SQS.

Consulting

- Upgrade a Vaadin 6 application
- By using Vaadin 8 I removed nearly all addons
- Spring Boot with embedded servlet container instead of Tomcat 7 makes development much easier
- Clean up dependencies
- Clean up and speed up Hibernate and Database
- Found and documented various critical bugs
- Migration guide for 3 existing projects
- Only database access possible
- ETL for the win

■ NETCONOMY SOFTWARE & CONSULTING – GRAZ, AUSTRIA

SENIOR SOFTWARE DEVELOPER AND ARCHITECT - 02/2008 - 03/2017

Responsibilities:

- Technical lead
- Architecture and development of the enterprise information management platform MUM. See http://mum-software.com for details.
- Find generic solutions for complex and specific customer needs to improve the software without building customer specific features
- Scrum Master incl. the introduction of Scrum to the team
- Maintain Jira, Confluence and BitBucket for the team
- Pre Sales
- Implement MUM based projects with customers

Main activities (sub projects):

- Integration of various authentication technique like LDAP, Active Directory, Kerberos, SAML2 and Azure AD.
- Integration of a BPMN process engine
- Migration project from Spring XML to a customizable Spring Java Config based on Servlet Specification 3.0
- Improvement of the the build process by moving to Gradle and dependency management
- Adapt MUM to run on Azure App Services
- Basic experience with SAP HCP
- ..

Used frameworks, techniques and tools

Java 6-8, Spring MVC, Spring Java Config, Spring Security, Spring Boot, LDAP, Kerberos, Active Directory, SAML2, Azure AD, GWT, Vaadin, SASS, CSS, JSP+JSTL, Jquery, Camunda BPM, Eclipse, BIRT, Hibernate 4, Liquibase, MS Sql Server, Oracle, Ant, Gradle, Maven, Git, SVN, JVM based Scripting, JavaScript Rhino + Nashorn, Azure App Services, New Relic APM, Tomcat 6-8.5, Apache Http 2.x, Intellij IDEA, Jira, Confluence, Bitbucket, Nexus Maven Repository.

■ FH JOANNEUM UNIVERSITY OF APPLIED SCIENCES – GRAZ, AUSTRIA JUNIOR SOFTWARE DEVELOPER – 10/2005 – 01/2008

Responsibilities:

- On-going development and customization of a degree course administration software
- Creating various reports for the degree coures, like grade sheets or diploma supplements
- 3rd level support
- Training

Used frameworks, techniques and tools:

Java 5 (Servlets), JSP, Sql Server, HTML, JavaScript, iText

EDUCATION AND TRAINING

10/2013 - 10/2013 Berlin, Germany

CERTIFIED PROFESSIONAL FOR SOFTWARE ARCHITECTURE iSAQB

In this foundation level course I learned:

- the concept and significance of software architecture
- tasks and responsibilities of software architects
- the role of software architects within projects
- state-of-the-art methods and techniques for developing software architectures

10/2000 - 06/2005 Klagenfurt, Austria

DI (FH) IN TELEMATIC AND NETWORK ENGINEERING FH Technikum Kärnten - University of Applied Sciences

Level in EQF EQF level 7

LANGUAGE SKILLS

Mother tongue(s): **GERMAN**

Other language(s):

| | UNDERSTANDING | | SPEAKING | | WRITING |
|---------|---------------|---------|-------------------|--------------------|---------|
| | Listening | Reading | Spoken production | Spoken interaction | |
| ENGLISH | C2 | C2 | C1 | C1 | C2 |

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

JOB-RELATED SKILLS

Job-related skills

In addition to my work related skills I have experience in:

Open Source

- Evaluation of Open Source projects
- Active development and contribution to OSS projects
- See https://github.com/moberwasserlechner/

Cloud Services

- Infrastructure as Code mindset
- AWS Cloud: CloudFormation, Route53, CloudFront, Elastic Beanstalk (PaaS) and customization with .ebextension, AWS Java SDK for SES, SNS, SQS, S3, RDS, EFS, Elastic Container Services (Fargate), Elastic Container Registry, Certificate Manager,
- Azure Cloud: Azure AD, App Services
- Google Cloud Platform: Container Registry

Progressive Web Apps (PWA)

- Angular 11+
- Capacitor (contributions and plugins)
- Ionic Framework
- User Experience Design (UXD)
- Angular component development

REST

- Spring Framework (MVC, Security, Boot, Data)
- CORS
- Swagger
- Soap UI
- Postman

Databases

- MongoDB
- PostgreSQL 9+
- MySQL/MariaDB
- MS Sql Server
- Oracle

WordPress

· Admin skills

ORGANISATIONAL SKILLS

Organisational skills

- Technical Lead
- Scrum Master
- · Organizing technical trainings