# Topic 1: Refactor legacy applications with AI

Legacy applications often suffer from outdated, unmaintainable code and suboptimal user interfaces. Your challenge is to develop an AI-powered tool that automates the modernization of legacy frontends.

## Key Objectives

* Input**:** Accept screenshots of the legacy application as input.
* Output**:** Generate a codebase for a new frontend, maintaining the application's original functionality and knowledge. In your case this will be JiVS IMP.
* The frontend should preferably be Angular v20. However, other frameworks are acceptable if it makes it easier to create a solution.
* If you decide to use Angular v20 please generate the code according to Angular’s best practices.
  + <https://v17.angular.io/guide/styleguide>
  + <https://angular.dev/overview>
* Service Stubs: Stub service calls within the generated frontend to facilitate easy backend integration.
* Reference Design: Optionally, allow users to provide a reference style in the form of screenshots or CSS files to influence the generated style.

## Scope and Constraints

* Backend functionality is not required for this challenge.
* Focus on creating clean, maintainable, and reusable frontend code.
* Ensure the generated design adheres to modern UI/UX principles, especially when a reference design is provided.
* For your solution the use of any AI is allowed, open- and close-sourced

## Provided

* You will receive a 150, - CHF voucher for the use of any AI service of your choice. If you want to make use of this, provide [Diellore Halitaj (mailto: diellore.halitaj@dm-international.com)](mailto: diellore.halitaj@dm-international.com) with the bill for your AI Service and we will reimburse you afterwards.
* You will receive an IMP instance, reachable under <https://lakeside.cloud.jivs.com/jivs/> , that you can explore as you see fit
* You will receive screenshots of the new design. Also, you will receive CSS examples that you can use.
* To download your data, see the section “How To Get Your Data”.

## Evaluation Criteria

* Accuracy of the generated frontend in replicating the application's functionality.
* Usability and maintainability of the generated code.
* Adherence to the reference design (if provided).
* Creativity and innovation in the AI-powered solution.

## How to submit your results

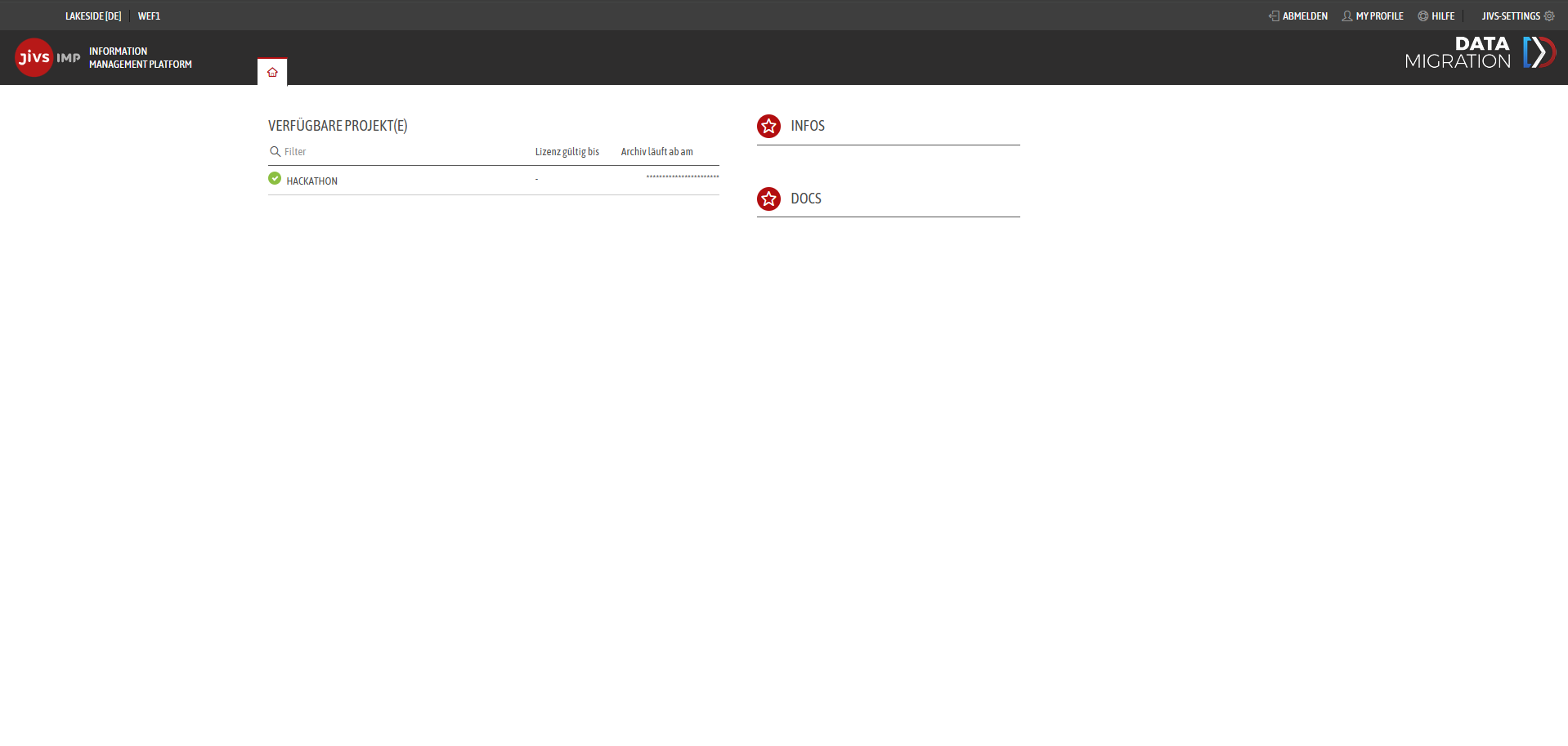
On Friday you will receive a USB flash drive from **Diellore Halitaj** where you must transfer all your code, presentation and results to for grading. Either **Heinrich Krupp** or **Diellore Halitaj** will collect these USB flash drives at 13:00 o’clock.

How to get help

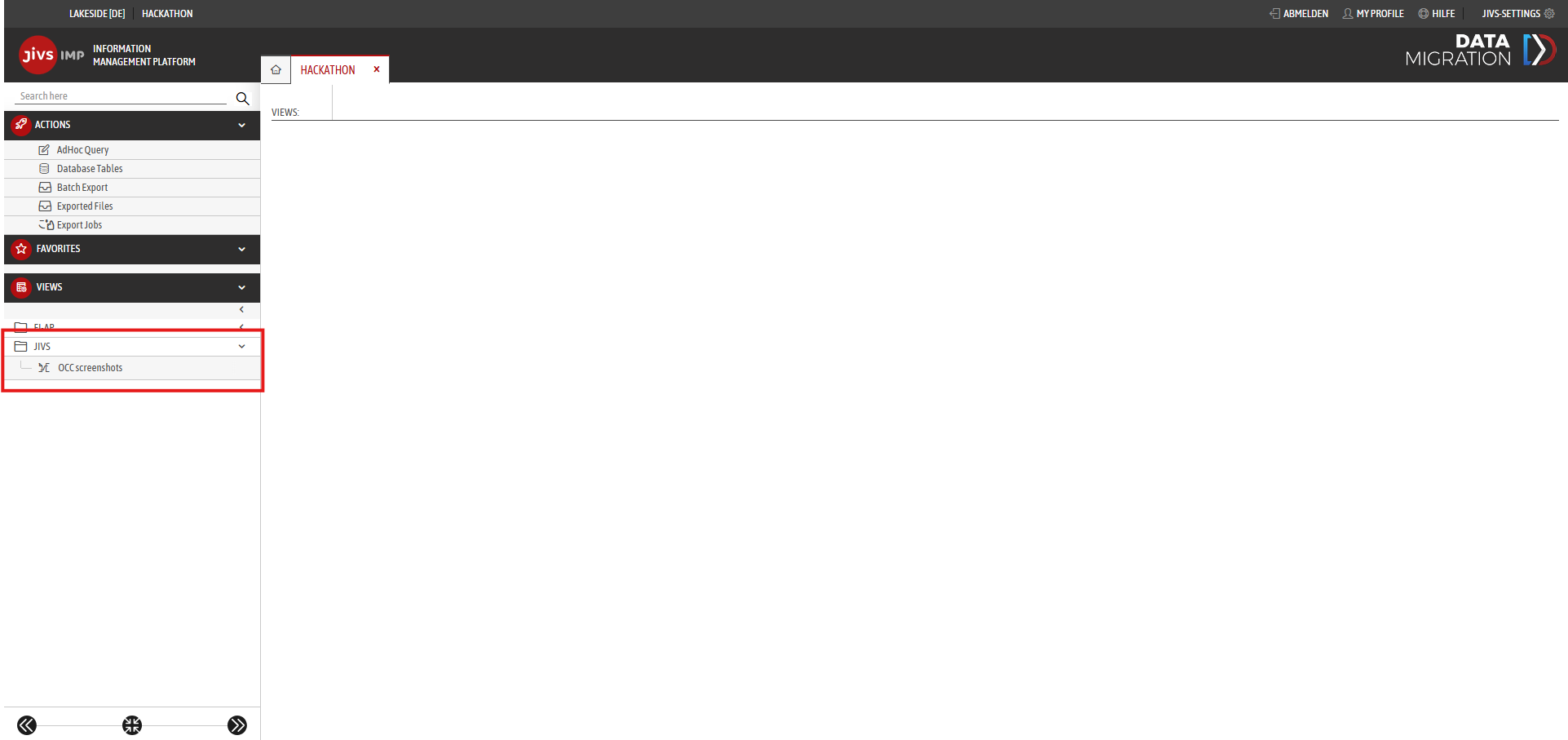
If you have any questions regarding the topics or the agenda of this Hackathon our on-side staff **Heinrich Krupp** will be happy to provide you with any help you might need. Feel free to contact him.

# How to Get Your Data

1. Log in with the following [Jivs IMP](https://lakeside.cloud.jivs.com/jivs/) credentials:
   1. User: lakeside
   2. Password: &d+LX9P1J8P?].JHE%&Iqj$
2. Select the only Project: “HACKATHON”



1. Select view circled in the red box depending on which theme you are working on:
   1. Theme 1: Screenshots



1. You will receive a List of Files as you can see in the screenshots. Proceed to select them one by one and press the “Anzeigen/Show” - Button circled in red to download.

