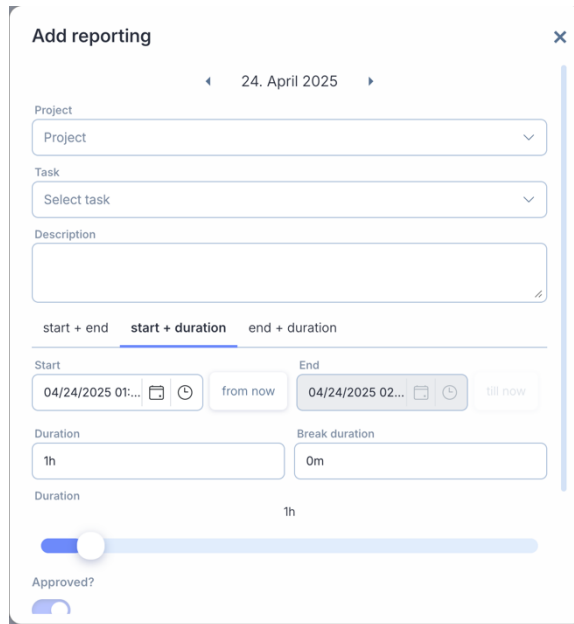# pdm solutions Technical Interview Task

In Germany, employees are by law required to report their own working hours. pdm is no exception. At pdm, we use a legacy ERP SaaS with a very laggy and unintuitive UI. For a variety of reasons, it is impossible for us to shift away from this legacy system. As a result, most of our colleagues keep a separate calendar to record their hours and the tasks they worked on, then spend dedicated time just to put the hours into the ERP system once a week, two weeks, or at the end of each month. Through chats with colleagues within the firm, the pain is proven to be shared among everyone and even extends beyond pdm to firms they have previously worked at. Logging hours on our ERP system is ranked by most of our colleagues as their least favorite activity. Hence, we would like to address this issue by creating an improved and automated workflow that makes logging hours no longer a pain.

What we know:

1. There are usually two ways people log their hours:
   - They keep a shadow Google Calendar (or regular calendar on device like *.ics). That is, apart from their main calendar that is exposed to the rest of the company, a private calendar that marks detailed tasks they completed within a timeframe
   - They keep a text-based hour tracker, which you can see in Appendix 1. They can come in different formats
2. Our ERP system has a REST API. We don't have access to it yet because it would need HR approval, but we can have it as long as we can prove the reliability and privacy protection of our tool.
3. To log hours, the employee first chooses the "Project", which is a general category of tasks. Then, they need to choose the specific task they worked on and lastly put in

description of what they worked on in detail. You will find the detailed Project-Task definition in Appendix 2.

What do we want to build

As a first step, we want to build a tool where employees can copy their text-based shadow calendar (across one or many days) in, verify if the recognized working hours are correct, edit if needed, then submit all the hours in one click. The key value of this tool is to remove the redundancy of logging hours on the ERP system and make the journey as simple, as intuitive, and as fast as possible.

If you still have some time left, you may consider some of the following:

1. iCalendar (.ics) / Google Calendar integration
2. Checkpoints of previous logged hours to avoid logging the same hours twice
3. Automatic ambiguity clarification requirements to employee
4. Memorize clarified ambiguity for future reference
5. or anything else you think of.

Requirements

You may use any language, framework, database, AI models, coding tools, packages of your choice. You should be able to justify your choices. You may host the tool locally for the scope of this project.