## Mid-term 360 degrees review

## Dear Company mentor,

You have been guiding a FICT graduate student over the last months, and we ask you to participate in a 360° review session on the student. This helps the student and us to get a better understanding on the progress for each of the learning outcomes.

We ask you to fill in the form below, hand over and discuss it with the student. The form is not a grading, but intended to help the student and the FICT assessors to get your view how the student is progressing. The 360° review starts with your feedback, followed by the self-evaluation of the student and finalized by feedback from peer graduation students en the assessors during the session at our location.

We ask you to describe for each learning outcome on which level of progress the student is working, and give substantiation and advice. By the end of the semester, all learning outcomes should be at least on proficient level. We recognize the following levels.

Label	Description				
Undefined	The student has not yet undertaken activities to demonstrate the learning outcome.				
Orienting	The student has made a start and explored the possibilities to demonstrate the learning outcome.				
Beginning	The student has taken the first steps and carried them out which contribute to demonstrating the learning outcome.				
Proficient	The student has demonstrated the learning outcome several times. The student will demonstrate the learning outcome at a sufficient level, if the development continues in this way.				
Advanced	The student has shown several times to work on this learning outcome with good results. The student has performed above expectations and has focused on continuous improvement. The student will demonstrate the learning outcome at a more than sufficient level, if the development continues in this way.				

In the appendix you'll find a description of the learning outcomes.

Student name	Juliën Verheijen
Student number	410544
<b>Graduation Profile</b>	User Interaction
Date	09-05-2024
Company mentor	Pepijn Coenders

	Learning Outcome	Level* (U, O, B, P, A)	Feedback
1	Professional duties	P	There is a clear path towards an end product. The phases needed are addressed, but sometimes lack an iteration due to the extent of depth that goes in a phase. Products resulting from this phase are, despite not always being validated by a stake holder, are relevant and on par with expected results.
2	Situation- Orientation	P	Work and products created are on par with company standards. Company/industry standard tools are also used to create these products. All self-initiated products offer value to the final goal. The added value of the end product can be hard to define at this point in time and needs to be documented/defined at a later stage.  Work is done in a clear structured way. It might be a little too strict sometimes. Juliën showed he can manage his time and push deadlines for products if that helps the team and end goal forward.
3	Future-Oriented Organisation	В	The project has a good plan which is executed. Business needs are defined, but not always verified. Trends are explored, but standardized tools/methods for validating domain trends are not used.  Ethical considerations are not explored.
4	Investigative Problem Solving	P	When meeting a problem, correct research questions are defined and explored using a mix of methods found in the DOT framework. The used methods for one question could use more variety. (more than 1 method used for an important research question)

			When new insights or problems arise, research is correctly shifted. Results from research could be validated more.
5	Personal Leadership	В	Planning and content are of good quality. An entrepreneurial approach is present, but could be expanded on. If feedback is asked, it is implemented, but following iterations might not be displayed to stakeholders.  Role in a team and duties is well understood but lacks additional toolsets to expand beyond one role.
6	Targeted Interaction	P	Interest of stakeholders is clear and communication with stakeholders is professional and structured. All communication is done on purpose and with a high level of added value and impact.

<sup>\*</sup>choose from Undefined, Orienting, Beginning, Proficient, Advanced

## Appendix: Explanation about the learning outcomes

- 1. Professional Duties: You carry out the professional duties on a bachelor level resulting in professional products in line with the IT-area you are working in. *Clarification*:
  - Professional duties is about the professional activities and the resulting professional products that are the core of your graduation portfolio. In activities and products the lifecycle of Analysis, Design, Realise, Advice and Manage&Control can be recognised although not all projects need to address all of these phases..
  - As a reference for the activities and products that are expected and their level you can look at (a) the HBO-I domain description<sup>1</sup> for the proficiency indicator at level 3 (Bachelor level), (b) the level and products that you created during the semesters 6 and 7 and that are related to the IT sub-domain of your graduation project and (c) the professional standards, expectations and level that is in line with the practice within the IT sub-domain of your graduation project.
  - A large part of your portfolio will consist of professional (end)products. Which products will be in your portfolio depends on the IT sub-domain and matching graduation project. They provide the context for the professional products that can be expected as a result of your activities. Therefor professional products should always be recognizable as common (professional) practice for the IT sub-domain of your graduation project. E.g. a software architecture in full stack software development is a common product for the IT sub-domain of full stack development and therefore should be in your portfolio as professional product when your graduation project lays inside the full stack development IT sub domain.
  - All IT sub-domains are related to one or a mix of the five architectural layers of the HBO-I domain description (User Interaction, Organizational Processes, Software, Hardware Interfacing, Infrastructure). This means that your activities and resulting professional products may be related to the proficiency description of one of these layers or on a mix of layers at level 3. Mixing layers is quite common in domains like cybersecurity, web development, AI engineering, game development, mobile development etc. You show professional duties when using the right mix of layers that fit to the needs of your graduation project.
- 2. Situation-Orientation: You apply your previously acquired knowledge and skills in a new and authentic context to deliver relevant and valuable results for the project and company. *Clarification*:
  - There should be a clear match between the knowledge and skills you offer the project and the project's needs. Also the needed knowledge and skills should be at level 3 (HBO-I framework).
  - You apply your previously acquired knowledge and skills in the project's context which
    means that you adapt to the processes and way of working of the company and to what is
    expected or standard for the IT sub-domain
  - Your activities and products are relevant for the project's stakeholders and users and creates value.
  - You put effort in showing, proving and monitoring the added value of your project for example by (a) the upward Technology Readiness Level (TRL) transition you realise, (b) validation oriented methodology and (c) explicit value creation related objectives you have defined using the Design Challenge (Newman 1995, 2003)

<sup>&</sup>lt;sup>1</sup> As described in: HBO-i Domeinbeschrijving 2018, HBO-I stichting, Amsterdam. <u>Domeinbeschrijving - HBO-i stichting</u>

- You work in a methodological and structured manner within a context where approach and solution area are open, with multiple stakeholders and multiple IT areas combined. Your project, activities and products show contextual innovation and exploration.
- 3. Future-Oriented Organisation: You explore the organisational context of your project, make business, sustainable and ethical considerations and manage all aspects of the execution of the project.

## Clarification:

- You put your situation orientation of Learning Outcome 2 in the perspective of the future (both inside and extending the project) and use this perspective to:
  - Create a project plan and monitor your project execution including the practice based research activities, project approach/strategy, planning, financial aspects, risks and the quality of the solution.
  - identify long term business legitimisation and business values that are relevant for the stakeholders.
  - Consider business and domain trends, sustainable development and ethical aspects in your judgement process using standards or methods/tools (e.g. the Technology Impact Cycle Tool TICT).
- 4. Investigative Problem Solving: You take a critical look at your project from different perspectives, identify problems, find an effective approach and arrive at appropriate solutions. *Clarification:* 
  - Throughout all phases of the project you identify and solve relevant problems and challenges:
    - o Initially (problem analysis) by
      - identifying the problem/opportunity of the stakeholders (client),
      - defining the scope and focus of the project and
      - formulating the related practice based research questions (using the Design Challenge),
    - During the project by identifying newly encountered problems/challenges (e.g. spikes) and formulating more in-depth or detailed research questions.
  - Effective approach means that you use a variety of research strategies, methods and activities based on the DOT framework<sup>2</sup> in a structured way in order to find justified answers to your research questions.
  - Appropriate solutions means you use the results from your research to create valuable solutions and validate these using test methods, usability tests and by assessing the conformity with stakeholders, experts, peers or using a benchmark.
- 5. Personal Leadership: you are entrepreneurial around your projects and personal development, you pay attention to your own learning ability and keep in mind what kind of IT professional and/or what type of positions you aspire to. *Clarification:* 
  - Entrepreneurial means that you take the lead in your own project, both planning as well as content wise.
  - Paying attention to your own learning ability means that you can reflect on your own actions, ask and receive feedback on your actions and look for further opportunities and possibilities that flow from hat feedback and that you are aware of your development as an IT professional.
  - You know which role you envision in the IT-landscape and what role you play in a team.

<sup>&</sup>lt;sup>2</sup> Reference: https://ictresearchmethods.nl/The DOT Framework

- 6. Targeted Interaction: You determine which partners play a role in your project, collaborate constructively with them and communicate appropriately to achieve the desired impact. *Clarification*:
  - Communicate appropriately means that you make sure that your communication has the right impact and execution.
  - Partners are the different stakeholders in the project to which you pay attention to and whose interest in the project are clear to you.