



# Process Discovery using Python (Praktikum)

Kick-off Meeting

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*Lab WS2020-2021*

# Course Interactions

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- All the praktikum related material will be available via the Moodle page of the course
- All the assignments and documents should be uploaded via the Moodle page of the course
- Questions and related stuff to the course should be asked via the Moodle forum
- Contact hours will be announced in Moodle
- In case of personal and urgent task contact:
  - [madhavi.shankar@pads.rwth-aachen.de](mailto:madhavi.shankar@pads.rwth-aachen.de)
  - [mahsa.bafrani@pads.rwth-aachen.de](mailto:mahsa.bafrani@pads.rwth-aachen.de)

## General Information: Sessions

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- Master Students (7 ECTS)
  - Meetings: **7 + 1** Kick-off meeting
  - Duration of meetings: **90** minutes each
  - Contact hours: set an appointment
  - Attendance at the Meetings is mandatory
  - It is acceptable to skip a maximum of **1** of the **7** meetings:
    - Except for **kick-off** meeting (mandatory)
    - Medical certification is NOT required.
    - This one skip is also expected to be communicated.

## General Information: Sessions

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- Bachelor Students (6 ECTS)
  - Meetings: **6 + 1** Kick-off meeting
  - Duration of meetings: **90** minutes each
  - Contact hours: set an appointment
  - Attendance to the Meetings is mandatory
  - It is acceptable to skip a maximum of **1** of the **6** meetings:
    - Except for **kick-off** meeting (mandatory)
    - Medical certification is NOT required.
    - This one skip is also expected to be communicated.

# General Information: Grades

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- Master Students
  - Your final score out of 100
    - Based on the assignments (60/100)
      - 6 assignments for 60 points
      - Each 10 points
    - and final oral examination (40/100)
      - The final oral examination is set as a personal appointment.
      - The oral examination should be taken before **31.01.2021**
  - Your final grade on RWTH Online (1-5)

1-5 Scale	0 – 59.9: 5
	60 – 64.9: 4
	65 – 69.9: 3.7
	70 – 74.9: 3.3
	75 – 79.9: 3
	80 – 83.9: 2.7
	84 – 86.9: 2.3
	87 – 89.9: 2
	90 – 93.9: 1.7
	94 – 96.9: 1.3
	97 – 100: 1

# General Information: Grades

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- Bachelor Students
  - Based on the assignments
  - 6 assignments for 60 points
    - Each 10 points
  - Your final score out of 100
    - scale 60 to 100
  - Your final grade on RWTH Online (1-5)

1-5 Scale	0 – 59.9: 5
	60 – 64.9: 4
	65 – 69.9: 3.7
	70 – 74.9: 3.3
	75 – 79.9: 3
	80 – 83.9: 2.7
	84 – 86.9: 2.3
	87 – 89.9: 2
	90 – 93.9: 1.7
	94 – 96.9: 1.3
	97 – 100: 1

## General Information: Retirement from the Course

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- You have **3** weeks since the time you have uploaded acknowledgment of the information to retire from the course:
  - Please send an email directly to [madhavi.shankar@pads.rwth-aachen.de](mailto:madhavi.shankar@pads.rwth-aachen.de) [mahsa.bafrani@pads.rwth-aachen.de](mailto:mahsa.bafrani@pads.rwth-aachen.de) about your retirement
  - If you don't retire, you will be asked to sign a document about your dedication to the course (from then onwards, you will get surely get a grade at the end of the course).
- If the withdrawal occurs after the **mentioned date**, then grade **5** will be added
  - The list of students will be communicated to the central administration on the date.
- If you skip more than one meeting, then you are out of the course and a **5** will be added to your grades
- Within three weeks:
  - **Register via RWTHOnline**
  - **Deregister (if you want to drop the course) via RWTHOnline**
  - Otherwise 5 will be the official grade.



## General Information: Acknowledgement Document

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- You need to sign a document about your acknowledgment of the information of the course.
- A photo/scan of the document needs to be uploaded in the provided section in Moodle.
  - Under section name: “Acknowledgement Document”
- The deadline to upload the signed document is 27-11-2020 (3 weeks)



# Assignments

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- Assignment should be done in groups.
  - Maximum group of 4 for masters and 5 for bachelors
    - Can be changed based on the number of students

## Assignments: Milestones

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- The assignment should be completed at different milestones.
- **Milestone 1:** Project initiation and set up infrastructure (10 points)
- **Milestone 2:** Project backlog, stories and requirement analysis (10 points)
- **Milestone 3:** Sprint 1 (10 points)  $\approx$  10 days
- **Milestone 4:** Sprint 2 (10 points)  $\approx$  10 days
- **Milestone 5:** Sprint 3 (10 points)  $\approx$  10 days
- **Milestone 6:** Testing and User Manual (10 points)  $\approx$  10 days
- **Milestone 7:** Final demo and oral exam (40 points)

## Assignment: Grading

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- **0-2:** the delivered content is unusable/totally incomplete
- **2-4:** the delivered content covers in minimal part the requests of the assignment
- **4-6:** the delivered content covers in small part the requests of the assignment
- **6-8:** the delivered content covers in part the requests of the assignment
- **8-10:** the delivered content fully satisfies the requests of the assignment.

For all phases, we will take into account the quality of deliverables marking the milestone, and the updates provided on the proposed software tools.

# Oral Exam: Grading

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- Master Students:
  - 0-10: the oral examination is plain bad
  - 10-20: the oral examination is bad.
  - 20-30: the oral examination is good.
  - 30-40: the oral examination is very good.

# Overall Covered Subjects

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- Kick-off meeting:
  - General Rules
  - Introduction to Process discovery
  - Introduction to process mining library (pm4py)
  - Project Initiation
- Meeting 1:
  - Introduction to project management
  - Requirement analysis
- Meeting 2:
  - Project management- Scrum
  - Introduction project management tools.
- Meeting 3:
  - How to develop clean high-quality coding and unit testing
- Meeting 4:
  - Docker image and Deployment.
- Meeting 5:
  - User manual
- Meeting 6:
  - Bachelor's final Demo
- Meeting 7:
  - Master's Tool demo

# Session Structure

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- Concept presentation for 20-30 minutes
- Group presentation for 3 sprints for 8-10 minutes
  - No need for slides. Just present the tool under development as planned for the sprints.

# Important Dates at One Glance

Date	Time	Type	Information	Instructor
09.11.2020	14:30-16:00	Meeting	Kick-off meeting (mandatory), Introduction to process discovery and pm4py, project initiation	Madhavi, Mahsa
11.11.2020	14:30-16:00	Meeting1	Introduction to project management and requirement analysis	Madhavi
12.11.2020	23:59	Deadline	Project initiation and set up infrastructure(10 points) upload via Moodle	
16.11.2020	14:30-16:00	Meeting2	Scrum, Introduction to tools	Mahsa
20.11.2020	14:30-16:00	Meeting3	High-quality coding, Unit test,	Mahsa
22.11.2020	23:59	Deadline	Project backlog, user stories, and requirement analysis(10 points) upload via Moodle	
06.12.2020	23:59	Deadline	Sprint 1- code and documentation (10 points) upload via Moodle	
11.12.2020	14:30-16:00	Meeting4	Deployment (Docker), Assessing and reporting on sprint 1	Madhavi, Mahsa
17.12.2020	23:59	Deadline	Sprint 2- code and documentation (10 points) upload via Moodle	
18.12.2020	14:30-16:00	Meeting5	User manual, Reporting on sprint 2	Madhavi
10.01.2021	23:59	Deadline	Sprint 3- code and documentation (10 points) upload via Moodle	
11.01.2021	14:30-16:00	Meeting6	Demo after 3 sprints. Final for bachelors	Madhavi, Mahsa
20.1.2021	23:59	Deadline	Testing and Assessment code and documentation (10 points) upload via Moodle	
21.1.2021		Meeting7	Final Demo (40 points)	Madhavi, Mahsa
25-01.2021 to 30.01.2021			Oral Exam (40 points) for Masters	Madhavi, Mahsa