Discrete Event Systems

Exercise session #1

Thomas Holterbach

Roland Schmid

nsg.ee.ethz.ch

ETH Zurich

15 Sep 2020
Every week, we will post new exercises on the website

Exercise Proceedings

At the beginning of every lecture week, we will publish a new exercise sheet here. This exercise sheet is intended to be solved during the exercise session on Thursday where two tutors will be available to assist you and to answer potential questions. The exercises often require information from the lecture notes, so please make sure that you have them available in some way.

You can hand in your solutions for correction after the exercise session on a voluntary basis. But this is not mandatory or required to be admitted to the exam.

Old Exams


Please keep in mind that the content of the lecture has been updated a few times in recent years! Thus, some of the material from the old exams might no longer be covered in the current lecture and additional material has been added.

Lecture Material

<table>
<thead>
<tr>
<th>Chapter Title</th>
<th>Lecturer</th>
<th>Lecture Notes</th>
<th>Exercises</th>
<th>Responsible Assistant</th>
<th>Additional Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 0</td>
<td>Laurent Vanbever</td>
<td>PDF 1:1</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Introduction</td>
<td></td>
<td>PDF 4:1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.09.2020</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chapter 1</td>
<td>Laurent Vanbever</td>
<td>PDF 1:1</td>
<td>Exercises</td>
<td>Thomas Hölterbach</td>
<td>Roland Schmid</td>
</tr>
<tr>
<td>Automata and Languages (Part 1)</td>
<td></td>
<td>PDF 4:1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.09.2020</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

https://disco.ethz.ch/courses/des/
Every week, we will post new exercises on the website
We will make the solutions available later during the week

Exercise Proceedings
At the beginning of every lecture week, we will publish a new exercise sheet here. This exercise sheet is intended to be solved during the exercise session on Thursday where two tutors will be available to assist you and to answer potential questions. The exercises often require information from the lecture notes, so please make sure that you have them available in some way.

You can hand in your solutions for correction after the exercise session on a voluntary basis. But this is not mandatory or required to be admitted to the exam.

Old Exams

Please keep in mind that the content of the lecture has been updated a few times in recent years! Thus, some of the material from the old exams might no longer be covered in the current lecture and additional material has been added.

Lecture Material

<table>
<thead>
<tr>
<th>Chapter Title</th>
<th>Lecturer</th>
<th>Lecture Notes</th>
<th>Exercises</th>
<th>Responsible Assistant</th>
<th>Additional Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 0</td>
<td>Laurent Vanbever</td>
<td>PDF 1:1 PDF 4:1</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Introduction</td>
<td>17.09.2020</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chapter 1</td>
<td>Laurent Vanbever</td>
<td>PDF 1:1 PDF 4:1</td>
<td>Exercises</td>
<td>Thomas Holterbach Roland Schmid</td>
<td>---</td>
</tr>
<tr>
<td>Automata and Languages (Part 1) 17.09.2020</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This year, all the exercise sessions will be held virtually
Yet, we aim to make them interactive
This year, all the exercise sessions will be held virtually.
Yet, we aim to make them interactive.

Step #1: you try to solve the exercise.
Once you have it solve, raise your virtual hand in Zoom.
This year, all the exercise sessions will be held virtually
Yet, we aim to make them interactive

Step #1: you try to solve the exercise
Once you have it solve, raise your virtual hand in Zoom

Step #2: one of you volunteer to present its solution to the class
To do that, you can share your screen
This year, all the exercise sessions will be held virtually. Yet, we aim to make them interactive.

Step #1: you try to solve the exercise.
Once you have it solve, raise your virtual hand in Zoom.

Step #2: one of you volunteer to present its solution to the class.
To do that, you can share your screen.

Step #3: we will discuss and correct the proposed solution.
You can ask questions using the in-meeting Zoom chat.
In the coming exercise sessions, you will have to draw automata

There are several tools to do that

A good online tool in the browser: http://madebyevan.com/fsm/

But feel free to use any online whiteboard/drawing tool of your choice

Alternatively, you can also just draw your solution on a sheet of paper