Seminar:
Technologies and Design of Graphical and Virtual User Interfaces
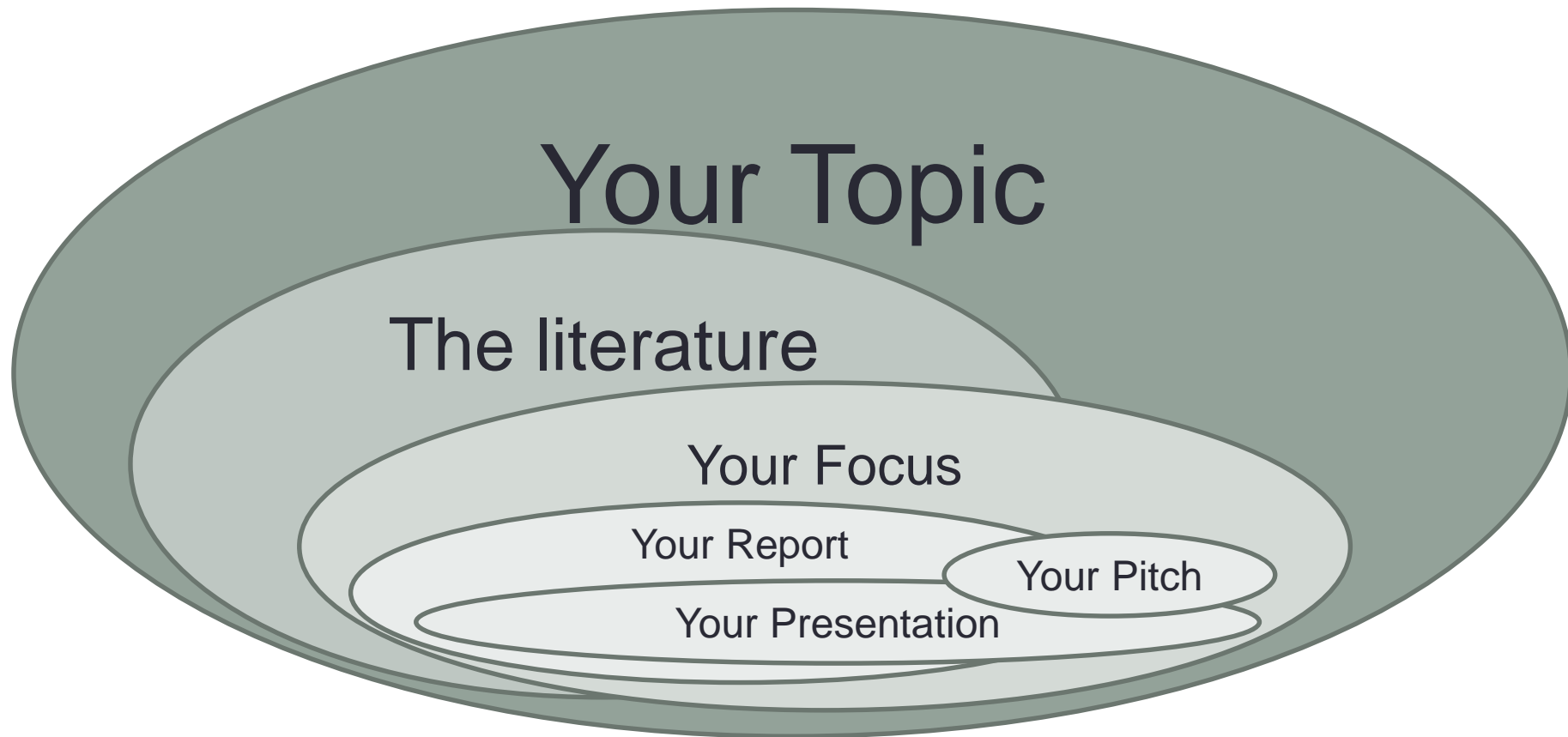
03 – How to write your report

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Reminder: Selection of the Subtopic

Reminder: Story and Audience

- Tell a story
  - Introduction
  - Main part
  - Result/conclusion

- Consider the audience
  - Previous knowledge
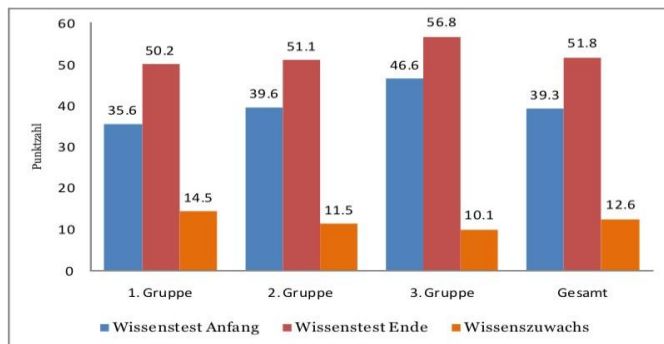 - Expectations
  - Interest in your topic

Create an Initial Report Structure

- Note what to include
  - Work with bullet points

- Iterate
  - Rearrange
    - Move bullet points until you get a sound structure
    - Remove unnecessary content
  - Refine
    - Add bullet points for more details

- Transform to text, figures, tables

Reminder: Figures Instead of Text

- Include good figures instead of text

- Good:

- Bad:

	1991 %	1992 %	1993 %	1994 %	1995 %	1996 %	1997 %	1998 %	1999 %	2000 %	2001 %	2002 %	2003 %	2004 %
Baden-Württemberg	7,52	8,29	9,17	9,84	11,23	12,04	12,63	13,45	14,01	14,39	14,55	14,12	14,87	
Bayern	6,63	7,74	9,14	10,84	14,29	15,10	16,99	17,58	19,42	19,95	20,30	20,89	21,71	
Hessen	22,26	22,62	23,96	24,89	25,44	26,18	26,46	26,68	26,46	26,66	26,77	26,83	26,94	
Niedersachsen	21,38	21,88	22,80	23,06	23,54	24,44	25,47	25,59	26,10	26,62	26,43	26,78	27,41	
Nordrhein-Westfalen	6,85	8,33	9,14	9,64	10,09	10,96	12,02	12,33	13,24	13,41	13,50	13,53	13,57	
Rheinland-Pfalz	12,48	13,44	15,30	15,90	16,17	17,25	18,23	18,83	20,12	20,27	20,10	20,22	20,10	
Saarland	11,42	11,71	11,93	12,24	12,49	12,96	13,73	13,77	14,84	16,89	17,34	17,90	17,82	

Writing Text (in Computer Science)

- No forward references
  - They are a hint for a bad structure

- In English: use active
  - Bad: "Then the software was programmed."
  - God: "Then we programmed the software."

- Only two tenses
  - Present for describing your approach
  - Past for describing what happened during the case study

Writing Text (in Computer Science)

- "The sky shone in a marvelous cyan blue and the small white clouds flew like powder over the infinite horizon."

- Short sentences

- Each sentence is its own fact/statement

- No shiny/metaphoric adjectives/adverbs

- Better: "The sky was blue. There were 10% clouds."

Writing Text (in Computer Science)

- No paragraphs with only one sentence

- No different types of paragraphs for pseudo structuring
  - For further structuring, use headings

Writing Text (in Computer Science)

- "Having a look at our data, obviously the parameter change shows an effect."

- In science, nothing is "obvious", "apparent", …
  - Everything needs to be proven, e.g., through numbers/statistics

Writing Text (in Computer Science)

- Abbreviations
  - Introduce them only once (use Latex features)
  - If already introduced in abstract, reintroduce in main text
  - Correct: "Virtual Reality (VR) is cool. It allows you to… In VR, …"

Writing Text (in Computer Science)

- Briefly describe figures and table

- Bad:
  - "Then we measured the values (Table 1). From this, we derive that…"

- Good:
  - "Then we measured the values. We list them in Table 1. The columns represent… The rows show… For example, for XYZ (column 1) the value of BLA (row 3) is 24,5. This is the highest value of BLA for all categories of ABC. From this, we derive that…"

Writing Text (in Computer Science)

- Do not repeat yourself
  - Every information is included only once
  - But: it is OK to reference an information
  - For example:
    - At the beginning:
      - "Consider a triangle, with the borders a, b, and c. If the angle between a and b is 90°, then $a^2+b^2=c^2$. This is called the Pythagorean theorem…"
    - Later in Report:
      - "As mentioned in Section 2, for right triangles $a^2+b^2=c^2$. We use this relationship to …"
      - "Then we use the Pythagorean Theorem (see Section 2) to …"

Writing Text (in Computer Science)

- Consistent citations
  - Entries in bibliography also for websites

- Typical citation style in computer science:
  - "A state-of-the-art consumer VR device is the HTC Vive [5]. It consists of…"
  - "Harms et al. describe an automated usability evaluation [8,22-24]. In their paper, the authors …"

Writing Text (in Computer Science)

- Cite consistently
  - Citation style is less important than consistency
  - Ensure clarity of references
    - No Way Out (2004) was an American professional wrestling pay-per-view event produced by World Wrestling Entertainment (WWE), held on February 15 at the Cow Palace in Daly City, California. Sponsored by THQ, it was the sixth event produced under the No Way Out name and starred wrestlers from the SmackDown! brand. **[1]**
    - No Way Out (2004) was an American professional wrestling pay-per-view event produced by World Wrestling Entertainment (WWE), held on February 15 at the Cow Palace in Daly City, California. Sponsored by THQ, it was the sixth event produced under the No Way Out name and starred wrestlers from the SmackDown! brand **[1]**.
    - Following Author et al. **[1]**, No Way Out (2004) was an American professional wrestling pay-per-view event produced by World Wrestling Entertainment (WWE), held on February 15 at the Cow Palace in Daly City, California. Sponsored by THQ, it was the sixth event produced under the No Way Out name and starred wrestlers from the SmackDown! brand.

Writing Text (in Computer Science)

- Footnotes only were really required
  - Adding "comments" to too many sentences shows that something is wrong with the overall text.
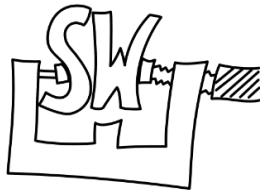
Writing Your Report

- Consider style requirements and standards
  - 10 - 12 pages
  - Excluding title page, empty pages, bibliography
  - Format: single line spacing, 10 - 12pt, max 2.5 cm margin

- Integrate hints gained from giving the talk

- Let somebody proof-read/review the report

Writing Your Report

- Expect problems while writing
  - Study issues
  - Family issues
  - Illness
  - ...

- Consider writing duration
  - Nobody writes a report over night

- Be in contact with your supervisor
  - Will not be possible when writing over the night of the deadline :-D

Questions???

Literature

- Dettori, Lucia: Research Talk 101. URL: http://clgiles.ist.psu.edu/research-presentation/ResearchPresentation.ppt