9. Individual Projects
Steps for the Development of a Generator

1. Task Definition
   a. Task description
   b. Examples for input (DSL)
   c. Examples for generated output
   d. Description of analysis and transformation tasks
2. Structuring Phase
   a. Develop concrete syntax
   b. Specify notation of tokens
   c. Develop abstract syntax
   d. Comprehensive tests
3. Semantic Analysis
   a. Characterize erroneous inputs by test cases
   b. Specify binding of names
   c. Specify computation and checks of properties
   d. Comprehensive tests
4. Transformation
   a. Develop output patterns
   b. Develop computations to create output
   c. Comprehensive tests
5. Documentation and Presentation of the Generator

Individual Projects in Current Lecture

	Topic	Student team
A		
B		
C		
D		
E		
F		
G		
H		

10. Visual Languages Developed using DEViL

Two conference presentations are available in the lecture material:

Domain-Specific Visual Languages: Design and Implemenation

Uwe Kastens, July 2007 CoRTA

Outline:

1. What are visual languages?

2. Domain-specific visual languages

3. Ingredients for Language design

4. A Development Environment for Visual Languages

5. Pattern-Based Specifications in DEViL

Specifying Generic Depictions of Language Constructs for 3D Visual Languages

Jan Wolter, September 2013, VL / HCC

Outline:

1. 3D Visual Languages

2. DEViL3D - Generator Framework for 3D Visual Languages

3. Generic Depictions