

Introduction to ConTEXT

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ConTEXT Basics

- ConTEXT is a document typesetting language
- A ConTEXT document has a core and an optional setup part
- The setup part is similar to the preamble in LaTeX
- ConTEXT markup is placed in ASCII text file format with file extension .tex for example myfile.tex
- The content is placed between the `\starttext` and `\stoptext` commands
- ConTEXT input file example with only a core

```
\starttext  
Hello, World!  
\stoptext
```

ConTEXT Basics

- ConTEXT example with setup and core
- Compile a ConTEXT input file as following

```
texexec myfile.tex
```

- texexec compiles table of contents, indexes, references and sorted lists
- texexec recompiles automatically to update the references
- ConTEXT supports various language specific interfaces such as English, German and Dutch
- To run ConTEXT with the English interface, enter

```
texexec -interface=en myfile.tex
```

ConTEXT Basics

- Normally, the ConTEXT output format is 'dvi'
- To change ConTEXT output format to 'pdf', enter

```
texexec -output=pdf tex myfile.tex
```

Or shorter

```
texexec --pdf myfile.tex
```

ConTEXT Basics

- Alternatively put these parameters in the setup part, so you do not need to enter them upon compiling

```
interface=en  
output=pdfTeX  
\starttext  
Hello, World!  
\stoptext
```

ConTEXT Basics

- Create chapters and sections as following

```
\starttext  
\chapter{One}  
This is the first chapter.  
\chapter{Two}  
This is the second chapter.  
\stoptext
```

ConTEXT Basics

- The command `\completecontent` creates a table of contents on a new page

```
\starttext
```

```
\completecontent
```

```
\chapter{One}
```

```
This is the first chapter.
```

```
\chapter{Two}
```

```
This is the second chapter.
```

```
\stoptext
```

ConTEXT Basics

- The command `\placecontent` creates a table of contents on the same page

```
\starttext  
\placecontent  
\chapter{One}  
This is the first chapter.  
\chapter{Two}  
This is the second chapter.  
\stoptext
```


ConTEXT Environments

- ConTEXT does not have environments like LaTeX
- The LaTeX 'abstract' environment can be simulated as following in ConTEXT

```
\starttext  
\startnarrower\switchtobodyfont[small]  
\midaligned{\bf Abstract}\par  
Enter your abstract text here.  
\stopnarrower  
\stoptext
```

ConTeXt Environments

- The command `\startnarrower` creates a paragraph, left and right indented by some white space
- The command `\switchtobodyfont` makes the font size some smaller than the current font size
- The command `\midaligned` creates a centered line

ConTeXt Environments

- The 'description' environment is created with the `\definedescription` command

```
\starttext
```

ConTeXt Environments

- The 'itemize' environment is created with the `\startitemize` command
- This creates an unnumbered list and every line starts with a bullet

```
\starttext  
\startitemize  
\item First item.  
\item Second item.  
\stopitemize  
\stoptext
```

ConTeXt Environments

- The 'enumerate' environment is created with the `\startitemize[n]` command
- The `n` option produces a numbered list

```
\starttext  
\startitemize[n]  
\item First item.  
\item Second item.  
\stopitemize  
\stoptext
```

ConTeXt Environments

- The 'quotation' environment is created with the `\startquotation` command and is closed off with `\stopquotation`

```
\starttext
```

```
\startquotation
```

```
This is a quotation.
```

```
\stopquotation
```

```
\stoptext
```

ConTEXT Environments

- ConTEXT also has inline quotes that can be created with either the `\quote` or `\quotation` commands
- The `\quote` command surrounds your quote with single quote characters
- The `\quotation` command surrounds your quote with double quote characters

```
\starttext
```

```
This is a \quote{quote} and this is a  
  \quotation{quotation}.
```

```
\stoptext
```

ConTEXT Environments

- The 'verbatim' environment for text that is not subject to macro expansion is created with the `\starttyping` command and is closed off with `\stoptyping`

```
\starttext  
\starttyping  
This is verbatim \Context.  
\stoptyping  
\stoptext
```


ConTEXT Environments

- The 'bibliography' environment created with the bib module
- Bibliography entries in the '.tex' ConTEXT input file are started with the command `\startpublication`
- The command `\setuppublications` in the .bbl file is optional, it defines entries to include, how to sort them or to include every entry or only the referenced ones
- The command `\completepublications` in the .bbl file creates the list of publications
- The command `\placepublications` in the .bbl file does not add something to the table of contents

ConTEXt Environments

- References have to be in a separate file, preferably with the same file extension .bbl for example myfile.bbl

```
\startpublication[k=Brodie84,t=article,a=L.~Brodie,  
y=1984,S=LB84]  
\artauthor[] {Leo} [L.] {} {Brodie}  
\arttitle{Thinking Forth, a language and philosophy  
for solving problems}  
\journal{Prentice Hall}  
\pubyear{1984}  
\stoppublication
```

ConTEXT Environments

- With this myfile.bbl file, you can now create the following myfile.tex ConTEXT file

```
\usemodule[bib]
\setuppublications[numbering=yes,sort=author]
\starttext
\section{My Life}
I no longer think Forth \cite[Brodie84].
\completepublications
\stoptext
```

ConTeXt Floats

- Floats are pieces of text that do not follow the main flow, but can go on the same page or elsewhere
- The `\placefigure` command can be used with a caption and a label so you can refer to it

```
\starttext  
\placefigure  
[ ]  
[fig:test]  
{test picture}  
[\externalfigure[test.png]}  
\stoptext
```

ConTEXT Floats

- In ConTEXT figures have their natural size by default
- The scaling can be influenced with the scale option
- The default scale is 1000 (100%), so scale 2000 gives you a figure twice as large
- ConTEXT can also specify the width of the figure in dimensions, for example half the width

```
\starttext  
\placefigure  
[ ]  
[fig:test]  
{test picture}  
[\externalfigure[test.png][scale=2000]}  
\stoptext
```

ConTeXt Floats

- The figures are usually defined at the top of the input file, above the `\starttext` command, and can be recalled when needed
- With `\useexternalfigure` the first parameter is the name of the macro, the next the file name and the third are scaling and sizing

```
\useexternalfigure
[estone]
[test.png]
[scale=2000]
\starttext
\placefigure
[]
[fig:estone]
{Test Picture: twice as large as its natural size}
{\externalfigure[test.png]}
\stoptext
```

ConTeXt Floats

- The command `\completelistoffigures` creates a list of figures on a new page

```
\starttext  
\completelistoffigures  
\placefigure  
[fig:test]  
{test picture}  
{\externalfigure[test.png]}  
\stoptext
```

ConTeXt Floats

- The command `\placelistoffigures` creates a list of figures on the same page

```
\starttext  
\placelistoffigures  
\placefigure  
[fig:test]  
{test picture}  
{\externalfigure[test.png]}  
\stoptext
```


ConTEXT Tables