1 Example Section

1.1 Predefined Commands

Not a lot, but still useful.

- **defc**: Definition color and bold
- mathc: Math color
- `codec`: Code color and ttfont

1.2 Predefined Box Types

I have defined multiple tcolorbox environments, to make it easier to use them, without always having to add the options.

In general there are three types of boxes:

- **defbox** for definitions, concepts etc.
- mathbox for math
- `codebox` for code

They mainly differ in color, which can be easily changed in `summary_individuals.tex`

For all three types of boxes there are some small different versions:

1.2.1 Definition Boxes

defbox

Normal definition box, with title, spanning the whole width of the environment. Takes title as the first argument and other options as the second argument.

defbox*: Same as **defbox**, but without a title. Can take one argument, which will be used as additional options.

smalldefbox

Like **defbox** but with the `hbox` option. Makes it adapt the width to the content.

smalldefbox*: Is to **smalldefbox** as **defbox*** is to **defbox**.

csdb*: Like **smalldefbox*** but centered to the environment.

inldefbox: Way to put definitions in-line.

1.2.2 Math Boxes

mathbox

Normal math box, with title, spanning the whole width of the environment. Takes title as the first argument and other options as the second argument.

mathbox*: Same as **mathbox**, but without a title. Can take one argument, which will be used as additional options.

smallmathbox

Like **mathbox** but with the `hbox` option. Makes it adapt the width to the content.

smallmathbox*: Is to **smallmathbox** as **mathbox*** is to **mathbox**.

csmb*: Like **smallmathbox*** but centered to the environment.

inlmathbox: Way to put math in-line.

1.2.3 Code Boxes

codebox

Normal math box, with title, spanning the whole width of the environment. Takes title as the first argument and other options as the second argument.

codebox*: Same as **codebox**, but without a title. Can take one argument, which will be used as additional options.

smallcodebox

Like **codebox** but with the `hbox` option. Makes it adapt the width to the content.

smallcodebox*: Is to **smallcodebox** as **codebox*** is to **codebox**.

cscb*: Like **smallcodebox*** but centered to the environment.

`inlcodebox: Way to put code snippets in-line.` Defaults to ttfont.

1.3 Code Snippets

1.3.1 Actual Code with listings

For actual code snippets I use the `listings` package. There are some graphical options in the preamble.

Example Java

```java
public class Example {
    /**
     * This is a docstring
     */
    public static void main(String[] args) {
        // This is a comment
        System.out.println("Hello World!");
        return;
    }
}
```

Example Python

```python
# This is a comment
def example() -> bool:
    """
    This is a docstring
    """
    print("Hello World!")
    return True
```

1.3.2 Pseudocode with algorithm2e

For pseudocode I use `algorithm2e`. I've modified the style in the preamble to make it look a bit nicer, especially to show scope better. There are also some additional commands I've defined - For these check the preamble.

Example Pseudocode

```
1  Function ExamplePseudocode(args):
2      // This is a comment
3      For int i = 0; i < 10; i = i + 1 do
4          If condition then
5              return true
```