

# MuToss Developer Guide - A Tutorial for Developing new Functions for MuToss.

Kornelius Rohmeyer

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## 1 Introduction

## 2 Writing a function for the MuToss-GUI

```
bonferroni <- function(pValues, alpha) {  
  adjPValues=sapply(pValues*length(pValues),function(x){min(x,1)})  
  if (missing(alpha)) {  
    return(list(adjPValues=adjPValues))  
  }  
  return(list(adjPValues=adjPValues,rejected=adjPValues<=alpha))  
}
```

### Keywords

```
mutoss.bonferroni <- function() { return(new(Class="MutossMethod",  
label="Bonferroni correction",  
errorControl="FWER",  
callFunction="bonferroni",  
output=c("adjPValues", "rejected"),  
info="<h2>Bonferroni correction</h2>  
<p>This simple method applies Boole's inequality to assure the FWER &alpha;  
by performing <i>n</i> tests each to the niveau <i>&alpha;/n</i>.</p>  
<h3>Reference:</h3>  
<ul>  
<li>Bonferroni, C. E. \"<i>Il calcolo delle assicurazioni su gruppi di teste.</i>\"  
In Studi in Onore del Professore Salvatore Ortu Carboni. Rome: Italy, pp. 13-60, 1935.</li>  
<li>Bonferroni, C. E. \"<i>Teoria statistica delle classi e calcolo delle probabilit  .</i>\"  
Pubblicazioni del R Istituto Superiore di Scienze Economiche e Commerciali di Firenze 8, 3-62, 1936.</li>  
</ul>",  
parameters=list(pValues=list(type="numeric"), alpha=list(type="numeric", optional=TRUE))  
) }
```