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Plugins Usage Examples

Refnotes Plugin Usage Examples

These are examples of citations to books [(Thapa2019)] and [(Obayashi2020)], a chapter on a smart companion [(Reis2020)], articles on IoT [(Hamza2023)], blimps [(Mahn2006)], cloud computing [(Llorente2009)], gas emissions [(Ranjith2020)], pedestrian crossing behaviour [(Sobhani2018)], smart bicycles [(Lee2018)] and diaper moisture [(Khan2018)], and to Web resources [(android41)], [(cloudexpo2008)] and [(gartner2021)].

Please use superscript and subscript annotations to write powers and indexes, *e.g.*, m^2 and CO_2.

Caption Plugin Usage Examples

Table 1 illustrates a boxed table with default column widths and Table 2 with specific column widths.

Table 1: Boxed table

Abbreviation	**Description**
EPS	European Project Semester
ISEP	Instituto Superior de Engenharia do Porto
USB	Universal Serial Bus

Table 2: Boxed table with specific column widths

Abbreviation	**Description**
EPS	European Project Semester
ISEP	Instituto Superior de Engenharia do Porto
USB	Universal Serial Bus

Table 3 shows the execution time results for each API. Table 4 lists the fruit bought at the grocery.

Table 3: Time response

API	**Time (s)**
EJML	26
JAMA	295
JBLAS	29
MTJ	18
WEKA	123

Table 4: Fruit Weight

Fruit	**Weight (kg)**
Pears	2.60
Apples	2.95
Oranges	1.90

Figure 1 displays a magnificent owl from Lapland.

Figure 1: Owl

Figure 2 illustrates the placement of two images side by side.

Figure 2: Images side by side

Figure 3 presents the European Project Semester (EPS) logo.

Figure 3: EPS logo

MathJax Plugin Usage Example

Equation \ref{eq:cosinesimilarity} represents the cosine similarity between two vectors of features. This similarity measurement takes values in the range of $[0,1]$ [(bandyopadhyay2013unsupervised)]. This is an in line expression $a+b=c$.

\begin{equation}

\cos\alpha=\frac{\hat{A}\cdot\hat{B}}{|\hat{A}\|\hat{B}|}\equiv\frac{\sum_{j=1}^{n} \hat{A}_j \hat{B}_j}{\sqrt{\sum_{j=1}^{n} \hat{A}^{2}_j}\sqrt{\sum_{j=1}^{n} \hat{B}^{2}_j}} \label{eq:cosinesimilarity} \end{equation}

As [(bandyopadhyay2013unsupervised)] states, the most popular similarity metrics are the distance and the cosine similarity. The distance-based metrics include the Euclidean distance, the Hamming distance or the Chebyshev distance, among others.

Equation \ref{eq:euclideandistance} displays the Euclidean distance formula.

\begin{equation} d(x,y)=\sqrt{\sum_{k=1}^{n}(x_{k}-y_{k})^{2}} \label{eq:euclideandistance} \end{equation}

Code Listing Example

The server code is presented in Listing 1.

Listing 1: Server-side code

```
    public class CheckersServer {
    private static final int PORT = 12345;
    private static char[][] board;
    private static List<ClientHandler> clients = new ArrayList<>();
    public static void main(String[] args) {
        board = new char[8][8];
        initializeBoard();
        try (ServerSocket serverSocket = new ServerSocket(PORT)) {
            System.out.println("Checkers Server is running...");
            while (true) {
                Socket clientSocket = serverSocket.accept();
                ClientHandler clientHandler = new
ClientHandler(clientSocket);
                clients.add(clientHandler);
                new Thread(clientHandler).start();
            }
        } catch (IOException e) {
            e.printStackTrace();
        }
    }
```

Bibliography