The ekaia package*

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Abstract

This package configures the `article` document class layout and provides a set of commands and environments to generate an article following the style of the University of the Basque Country Science and Technology Journal Ekaia.

Contents

1 Introduction

In the last centuries, advances in science and technology have produced a significant impact in the society. For that reason, it is necessary to build a divulgation bridge between the scientific community and the society, publishing the research results in a knowledgeable fashion.

In the Basque Country, the divulgation of science and technology has encountered problems because technical Basque Language was not sufficiently developed.

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*This file (`ekaia.dtx`) has version 1.06 last revised 19-01-02.

Hopefully, a great amount of work has been carried out in the last years. Nowadays, a variety of subjects can be studied in Basque Language at the university, and research groups that use Basque Language for their work have been created. This fact has increased the need of scientific divulgation in Basque Language, because the terminology created in the scientific community and the tradition built around it do not have the sufficient impact in the society. Scientific subjects are usually addressed in Basque media. However, at this moment this is not sufficient.

In 1989, the University of the Basque Country (UPV/EHU) founded the journal Ekaia to support the divulgation of science and technology in Basque Language. Unfortunately, this first attempt was brief. In 1995, a group of lecturers of the University of the Basque Country re-founded the journal, because of the need of a terminological unity and the continuous appearance of new discoveries and concepts.

The Ekaia journal is mainly written for readers that have a basic scientific formation. Its main objectives are the following: to publish the last advances in science and technology, to provide complementary bibliography for university students and non-university teachers, to support the standardization of the technical and scientific Basque Language and to help to solve the problems that arise when the Basque Language is used in these fields. Ekaia is published twice a year, and it gathers articles of a variety of scientific fields.

The `ekaia` package configures the `article` document class layout and provides a set of commands and environments to prepare articles using LaTeX for the peer review process of the University of the Basque Country Science and Technology Journal Ekaia.

2   Calling the package

The package `ekaia` is called using the `\usepackage` command:
`\usepackage[<options>]{ekaia}`.

The following package options are provided in the current `ekaia.sty` version:

- `review`: This option must be selected when generating the manuscript for peer-review.

- `final`: This option must be selected when generating the final manuscript.

The `ekaia` package requires the following additional packages: `babel`, `geometry`, `sectsty`, `fancyhdr`, `indentfirst`, `basque-date` and `ccicons`.

3   Package usage

3.1   LaTeX commands and environments provided by the package

The `ekaia` package provides the following LaTeX commands for Ekaia articles preparation:

- `\izenburua{}`: This command is used to produce the title of the document Basque.

- `\azpiizenburua{}`: This command is used to produce the title of the document in English.

- `\datak{}{}`: Submition and acceptance dates are introduced in this command, respectively.

Additionally, the `ekaia` package provides the following LaTeX environments:

- `autoreak`: This environment is used to introduce information about the authors (names, surnames, affiliations and contact information).

- `laburpena`: This environment is used to produce the article abstract in Basque Language.

- `hitz-gakoak`: This environment sets the keywords in Basque Language.

- `abstract`: This environment is used to produce the article abstract in English.

- `keywords`: This environment sets the keywords in English.

3.2 Package usage example

The following `.tex` code example illustrates how to use the commands and environments summarized in the previous section to prepare a document for submission to the Ekaia journal.

```
\documentclass[twoside,a4paper,11pt]{article}
\usepackage[review]{ekaia}
\begin{document}
\izenburua{Ekaia Aldizkariko egileentzako gidalerroak}
\azpiizenburua{Ekaia: Guidelines for authors}

\begin{autoreak}
\textit{Egile guztien izenak$^1$}
\linebreak
$^1$Egile guztien afilizazioa (instituzioa, hiria, herrialdea)
\linebreak
Egile nagusiaren helbide elektronikoa
\linebreak
Egile nagusiaren helbide osoa (Instituzioa, kalea, zenbakia,
posta kutxatila, hiria, herrialdea)
\linebreak
Egile nagusiaren ORCID zenbakia
\end{autoreak}
```

```
\datak{XXXX-XX-XX}{XXXX-XX-XX}

\begin{laburpena}
(250 hitz gehienez eta paragrafo batean)
\end{laburpena}

\begin{hitz-gakoak}
Ekaia, \LaTeX{}, euskara.
\end{hitz-gakoak}

\begin{abstract}
 (Maximum 250 words and one paragraph)
\end{abstract}

\begin{keywords}
Ekaia, \LaTeX{}, Basque language.
\end{keywords}

\section{Sarrera}
```

3.3 Creating the bibliography

The use of the `thebibliography` environment is highly recommended to produce the article bibliography according to the Ekaia journal bibliography style[1]. The following example helps to illustrate the procedure.

```
\renewcommand\refname{\indent Bibliografia}
\begin{thebibliography}{99}

\bibitem{ibarra}
IBARRA E. eta ETXEBARRIA J.R. 2014. "<\LaTeX{}: euskarazko dokumentu
zientifiko-teknikoen ediziorako baliabideak">. \textit{Ekaia},
27, 329-343.
\end{thebibliography}
```

A Appendices

A.1 License

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[1]http://www.ehu.es/ojs/index.php/ekaia/about/submissions#authorGuidelines

A.2   Version history

- **Version v1.00 (14/07/27).** Initial non-public version for development.

- **Version v1.02 (14/12/26).** First public version.

- **Version v1.04 (16/11/04).** `azpiizenburua` command included to generate the title in English. Minor mistakes corrected.

- **Version v1.06 (19/01/02).** Template modifications in order to comply with UPV/EHU Press latest requirements.

A.3   Implementation

At the beginning of the code, document language selection is performed using the `babel` package. Ekaia articles are written in Basque. However, as the abstract must be also written in English, both language options are loaded.

```
1 \RequirePackage[english,basque]{babel}
2 \selectlanguage{basque}
```

Spaces according to Basque language rules are set.

```
3 \frenchspacing
```

Basque date options are loaded

```
4 \RequirePackage{basque-date}
```

The line spacing is set to one and a half of the standard line spacing.

```
5 \linespread{1.3}
```

Document margin layout is selected using the `geometry` package.

```
6 \RequirePackage[top=2.6cm,bottom=2.8cm,left=3cm,right=3cm]{geometry}
```

Additionally, section font size selection is achieved using the `sectsty` package.

```
7 \RequirePackage{sectsty}
8 \sectionfont{\fontsize{12}{15}\selectfont}
9 \subsectionfont{\fontsize{12}{15}\selectfont}
10 \subsubsectionfont{\fontsize{12}{15}\selectfont}
```

Creative commons icons are loaded to generate the final manuscript version

```
11 \RequirePackage{ccicons}
```

Package options for `review` and `final` manuscript versions are provided

```
12 \newcommand{\ekaiafoot}{dummy}
13 \DeclareOption{review}{\renewcommand{\ekaiafoot}{
14 \tiny Errebisiorako bertsioa\\
15 Ekaia aldizkaria (UPV/EHU), \eusdata}
16 }
```

```
17 \DeclareOption{final}{\renewcommand{\ekaiafoot}{
18 \tiny\copyright UPV/EHU Press\\
19                               ISSN: 0214-9001\\
20                               e-ISSN: 2444-3255\\
21                               \ccLogo\ccAttribution\ccNonCommercial\ccShareAlike\\
22                               Attribution-NonCommercial-ShareAlike\\
23                               4.0 international (CC BY-NC-SA 4.0)}
24 }
25 \ExecuteOptions{review}
26 \ProcessOptions\relax
```

Document footer definition is performed using the `fancyhdr` package.

```
27 \RequirePackage{fancyhdr}
28 \pagestyle{fancy}
29 \renewcommand{\headrulewidth}{0pt}
30 \fancyhead[L]{ }
31 \fancyhead[C]{ }
32 \fancyhead[R]{ }
33 \fancyfoot[L]{ }
34 \fancyfoot[C]{\thepage}
35 \fancyfoot[R]{\ekaiafoot}
36
37 \makeatletter
38 \let\ps@plain\ps@fancy
39 \makeatother
40
41 \makeatletter
42 \def\ps@headings{%
43     \let\@oddfoot\@empty
44     \def\@oddhead{{\slshape\rightmark}\hfil\thepage}%
45     \let\@mkboth\markboth
46     \def\sectionmark##1{%
47       \markright {\MakeUppercase{%
48         \ifnum \c@secnumdepth >\m@ne
49           \thesection\quad
50         \fi
51         ##1}}}}
52 \makeatother
53
```

Indent after the `\section` command is forced using the `indentfirst` package.

```
54 \RequirePackage{indentfirst}
55
```

Figure and table captions are re-defined according to the Basque Language rules.

```
56 \makeatletter
57 \def\fnum@figure{\textbf{\fontsize{10}{15}\selectfont\thefigure .~irudia}}
58 \makeatother
59
60 \makeatletter
61 \def\fnum@table{\textbf{\fontsize{10}{15}\selectfont \thetable .~taula}}
```

```
62 \makeatother
63
64 \makeatletter
65 \long\def\@makecaption#1#2{%
66 \vskip\abovecaptionskip
67 \sbox\@tempboxa{#1\textbf{.} \fontsize{10}{15}\selectfont #2}%
68 \ifdim\wd\@tempboxa >\hsize
69 #1\textbf{.} \fontsize{10}{15}\selectfont #2\par
70 \else
71 \global \@minipagefalse
72 \hb@xt@\hsize{\hfil\box\@tempboxa\hfil}%
73 \fi
74 \vskip\belowcaptionskip}
75 \makeatother
76
```

Commands \thesection, \thesubsection, etc. are redefined in order to comply with the Basque Language rules. Additionally, section indent is set.

```
77 \renewcommand\thesection {\indent \arabic{section}.}
78 \renewcommand\thesubsection {\thesection \arabic{subsection}.}
79 \renewcommand\thesubsubsection {\thesubsection \arabic{subsubsection}.}
80 \renewcommand\theparagraph {\thesubsubsection \arabic{paragraph}.}
81 \renewcommand\thesubparagraph {\theparagraph \arabic{subparagraph}.}
82
```

\izenburua   A new command is defined in order to create the document title in Basque.

```
83 \newcommand{\izenburua}[1]{
84 \begin{flushleft}
85 \fontsize{16}{15}\textbf{#1}\linebreak\fontsize{11}{15}
86 \end{flushleft}
87 }
```

\azpiizenburua   A new command is defined in order to create the document title in English.

```
88
89 \newcommand{\azpiizenburua}[1]{
90 \begin{flushleft}
91 \fontsize{12}{11}\textit{(#1)}\linebreak\fontsize{12}{11}
92 \end{flushleft}
93 }
94
95
96
```

\datak   A new command is defined in order to create the document submission and acceptance dates.

```
97 \newcommand{\datak}[2]{
98 \begin{flushleft}
99 Jasoa:~{#1}
100 \linebreak
101 Onartua:~{#2}
102 \linebreak
```

7

103 \end{flushleft}
104 }
105

autoreak A new environment is created in order to print the document authors, affiliations and contact information.

106 \newenvironment{autoreak}
107 {
108 \flushright
109 }
110

laburpena A new environment is created to write the abstract in Basque.

111 \newenvironment{laburpena}
112 {
113 \selectlanguage{basque}
114 \setlength{\parindent}{0pt}
115 \textbf{Laburpena:}~\itshape
116 }{\setlength{\parindent}{0.8cm}\\ }
117

abstract The abstract environment is redefined to write the abstract in English according to the Ekaia Journal style.

118 \renewenvironment{abstract}
119 {
120 \selectlanguage{english}
121 \setlength{\parindent}{0pt}
122 \textbf{Abstract:}~\bfseries
123 }{\setlength{\parindent}{0.8cm}\selectlanguage{basque}\\ }
124

hitz-gakoak A new environment for keywords in Basque is created.

125 \newenvironment{hitz-gakoak}{
126 \setlength{\parindent}{0pt}
127 \textbf{Hitz gakoak:}~
128 }{\setlength{\parindent}{0.8cm}\\ }
129

keywords A new environment for keywords in English is created. Language selection command is used to switch between languages.

130 \newenvironment{keywords}{
131 \setlength{\parindent}{0pt}
132 \textbf{Keywords:}~
133 }{\setlength{\parindent}{0.8cm}\\ }
134