1 ASCII Text

Následující text, je ukázkou nejjednodušší formy dokumentu. Bohužel neobsahuje žádné strukturní značky, které by umožnily jednoduše měnit vzhled textu, generovat obsah, nebo výrazně odlišit jednotlivé části. Následující text se pokusíme zpracovat doplněním strukturních značek makrojazyka LaTeX 2_ε.

```
  Linux Device Guide
  ------------------

  Block Device Drivers

   Initialization

   Initialization of block devices is a bit more complex than
   initialization of character devices, especially as some
   ‘‘initialization’’ has to be done at compile time.

   There is also a register_blkdev() call that corresponds to the character
   device  register_chrdev() call, which the driver must call to say that it
   is present,  working, and active.

    The file blk.h

   Now you need to edit blk.h. Under #ifdef MAJOR_NR, there is a section
   of defines that are conditionally included for certain major numbers,
   protected by #elif (MAJOR_NR == DEVICE_MAJOR). At the end of this
   list, you will add another section for your driver. In that section,
   the following lines are required:

#define DEVICE_NAME        "device"
#define DEVICE_REQUEST     do_dev_request
#define DEVICE_ON(device)  /* usually blank, see below */
#define DEVICE_OFF(device) /* usually blank, see below */
#define DEVICE_NR(device)  (MINOR(device))

   DEVICE_NAME is simply the device name. See the other entries in blk.h
   for examples.

   DEVICE_REQUEST is your strategy routine, which will do all the I/O on
   the device. See The Strategy Routine for more details on the strategy
   routine.

   DEVICE_ON and DEVICE_OFF are for devices that need to be turned on
   and off, like floppies. In fact, the floppy driver is currently the
   only device driver which uses these defines.

   DEVICE_NR(device) is used to determine the number of the physical
   device from the minor device number. For instance, in the hd driver,
   since the second hard drive starts at minor 64, DEVICE_NR(device) is
   defined to be (MINOR(device)>>6).
```

2 Strukturní značky LaTeX2e

U příkazů je rozlišována velikost písmen, protože LaTeX 2_ε je case sensitive, příkaz začíná znakem `\` a text jemuž přiřaduje určitou vlastnost je uzavřen v `{` závorkách `}`.

2.1 Členění textu

- `\chapter{}` – nadpis kapitoly
- `\section{}` – nadpis sekce
- `\subsection{}` – podnadpis
- `\subsubsection{}` – podnapis nižší úrovně

Jednotlivé odstavce textu se oddělují volným řádkem.

2.2 Prostředí

Text který je ohraničený pomocí `\begin{`*prostředí*`}` a `\end{`*prostředí*`}` má urřitou vlastnost. Prostředí je možné do sebe zanořovat, podle úrovně se pak automaticky upravují jeho vlastnosti.

- `desctription` – popis, definice
- `enumerate` – číslovaný seznam, jednotlivé položky odděluje `\item`
- `itemize` – seznam s odrážkami (například tento).
- `verbatim` – výpis z terminálu, zdrojový kód

2.3 Vlastnosti písma

- `\texttt{text}` – `neproporcionální písmo`
- `\textit{text}` – *kurzíva*
- `\textbf{text}` – **tučné písmo**
- `\verb|text|` – neproporcionální písmo, slouží k zápisu textu, který obsahuje speciální znaky, např. `%`, `_`, `^`, ...

2.4 Další možnosti

Komentáře

Text za `%` je komentář a při zpracování se ingnoruje, znak procenta % se zapíše pomocí `\%`, stejný postup funguje i pro další speciální znaky `@`, #, $, `^` – `\@`, `\#`,`\$`,`\^`, ...

Odkazy

Místo na které se chceme odkázat se označí pomocí `\label{`*identifikace*`}` a jako odkaz se použije – `\label{`*identifikace*`}` na stránku nebo `\ref{`*identifikace*`}`.

Obrázky

Vektorový obrázek se vkládá ve formátu EPS (Encapsulated PostSript), bitmapy ve formátu PNG a fotografie ve JPEGu, příkaz pro vložení obrázku: `\includegraphics{obrazek.epd}`, tuto značku je možno vložit do různých prostředí, např. pro zarovnání nebo měnit rozměry.

3 Strukturovaný dokument

```
\chapter{Linux Device Guide}
%-----------------

\section{Block Device Drivers}
\subsection{Initialization}

Initialization of block devices is a bit more complex than
initialization of character devices, especially as some
``initialization'' has to be done at compile time.

There is also a \texttt{register_blkdev()} call that corresponds to the character
device \texttt{register_chrdev()} call, which the driver must call to say that it
is present, working, and active.

\subsection{The file blk.h}

Now you need to edit blk.h. Under \verb|#ifdef MAJOR_NR|, there is a section
of defines that are conditionally included for certain major numbers,
protected by \verb|#elif (MAJOR_NR == DEVICE_MAJOR)|. At the end of this
list, you will add another section for your driver. In that section,
the following lines are required:

\begin{verbatim}

 #define DEVICE_NAME        "device"
 #define DEVICE_REQUEST     do_dev_request
 #define DEVICE_ON(device)  /* usually blank, see below */
 #define DEVICE_OFF(device) /* usually blank, see below */
 #define DEVICE_NR(device)  (MINOR(device))

\end{verbatim}

\begin{description}
\item[\texttt{DEVICE_NAME}]is simply the device name. See the other entries in blk.h
for examples.

\item[\texttt{DEVICE_REQUEST}]is your strategy routine, which will do all the I/O on
the device. See The Strategy Routine for more details on the strategy
routine.

\item[\texttt{DEVICE_ON and DEVICE_OFF}]are for devices that need to be turned on
and off, like floppies. In fact, the floppy driver is currently the
only device driver which uses these defines.

\item[\texttt{DEVICE_NR(device)}]is used to determine the number of the physical
device from the minor device number. For instance, in the hd driver,
since the second hard drive starts at minor 64, \texttt{DEVICE_NR(device)} is
defined to be \verb|(MINOR(device)>>6)|.
\end{description}
```

4 Zpracovaný dokument

1 Linux Device Guide

1.1 Block Device Drivers

1.1.1 Initialization

Initialization of block devices is a bit more complex than initialization of character devices, especially as some "initialization" has to be done at compile time.

There is also a `register_blkdev()` call that corresponds to the character device `register_chrdev()` call, which the driver must call to say that it is present, working, and active.

1.1.2 The file blk.h

Now you need to edit blk.h. Under `#ifdef MAJOR_NR`, there is a section of defines that are conditionally included for certain major numbers, protected by `#elif (MAJOR_NR == DEVICE_MAJOR)`. At the end of this list, you will add another section for your driver. In that section, the following lines are required:

```
#define DEVICE_NAME         "device"
#define DEVICE_REQUEST      do_dev_request
#define DEVICE_ON(device)   /* usually blank, see below */
#define DEVICE_OFF(device)  /* usually blank, see below */
#define DEVICE_NR(device)   (MINOR(device))
```

`DEVICE_NAME` is simply the device name. See the other entries in blk.h for examples.

`DEVICE_REQUEST` is your strategy routine, which will do all the I/O on the device. See The Strategy Routine for more details on the strategy routine.

`DEVICE_ON` **and** `DEVICE_OFF` are for devices that need to be turned on and off, like floppies. In fact, the floppy driver is currently the only device driver which uses these defines.

`DEVICE_NR(device)` is used to determine the number of the physical device from the minor device number. For instance, in the hd driver, since the second hard drive starts at minor 64, `DEVICE_NR(device)` is defined to be `(MINOR(device)>>6)`.