

Background ([Issue#5847](#)):

Our issue is about adding tips for different user input fields. For example, when the mouse is being hovered over the field title “Author”, a tip will show up to tell the user what kind of format they should obey.



Figure (1): Editor panel

Since tooltip is already defined in JavaFX. The main idea is to add a tooltip for each field label. Therefore, we added a function called “setTip” in `org.jabref.gui.fieldeditors.FieldNameLabel`. Below is the code implementation.

Code Snippet (1): setTip method

```
public void setTip(Field field) {  
    Tooltip tip = new Tooltip();  
    if (field.isStandardField()) {  
        StandardField standardField = (StandardField) field;  
        switch (standardField) {  
            case AUTHOR:  
                tip.setText(Localization.lang("The name(s) of the author(s), in  
the format described in the LaTeX book. Remember, all names are separated with the  
and keyword, and not commas."));  
                break;  
            case JOURNAL:  
                tip.setText(Localization.lang("Journal name. Abbreviations may  
be used."));  
                break;  
            case TITLE:  
                tip.setText(Localization.lang("The work's title"));  
                break;  
            case YEAR:  
                break;  
        }  
    }  
    field.setTooltip(tip);  
}
```

```

        tip.setText(Localization.lang("The year of publication or, for
an unpublished work, the year it was written. Generally it should consist of four
numerals, such as 1984, although the standard styles can handle any year whose last
four nonpunctuation characters are numerals, such as '(about 1984)'."));
        break;
    default:
        return;
    }
} else if (field instanceof InternalField) {
    InternalField internalField = (InternalField) field;
    switch (internalField) {
        case KEY_FIELD:
            tip.setText(Localization.lang("[First author'last name][Article
year], e.g. Jones2020"));
            break;
        default:
            return;
    }
}
this.setToolTip(tip);
}

```

The context of tips is also defined in the JabRef_en.properties. The reason to use an if-else case is that the fields are divided into different categories: StandardField and InternalField. These fields belong to different classes. For example, AUTHOR is in the StandardField while KEY_FIELD is in the InternalField. Figure (2) shows the result after making these changes.

The screenshot shows the JabRef application interface. The left sidebar has a vertical menu with icons for various functions. The main area is divided into two panes. The left pane contains a form for entering article information with the following fields: Author (Joseph Shipman), Bibtextkey (Shipman1997), Journal, Title (Anxiety disorder: A persep), and Year. A tooltip is displayed over the Author field with the text: "The name(s) of the author(s), in the format described in the LaTeX book. Remember, all names are separated with the and keyword, and not commas." The right pane shows the article details for "Article (Shipman1997)", including the title "Shipman, J. Anxiety disorder: A persep" and an abstract: "Abstract: This paper reviews connections between physics and computation, a explores their implications. The main topics are computational "hardness" of physical systems, computational status of fundamental theories, quantum computation, and the Universe as a computer."

Figure (2): After implementation of ToolTip

Conclusion

The issue by itself was not difficult to work with. After we submitted the pull request, the developers and other contributors gave us a handful of useful pieces of advice and suggestions. Through this experience, we realized that adjusting the code style and rules is more time-consuming than fixing the issue by itself. As one can notice from our [pull request](#), most of the comments are about normalizing the code. At first, our change was not easy to comprehend. However, with the detailed and useful suggestions given by developers, we improved our code step by step, and hence, made it clear to meet the requirements. Through fixing this issue, we learnt more about our system. For example, the context of tips is not defined in the Strings file, instead, they are defined in the properties file.

We have to admit that this was an excellent experience, having the chance to communicate with the developers and other contributors. They are all warm hearted and were willing to help us improve the code. This has indeed increased our passion to contribute to the Open Source community!