

# The Design Study of a Task Management Tool for Undergraduate Thesis

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**Abstract**—In this paper, aiming at the problems existing in the management workflows of undergraduate thesis in colleges, a task management tool for undergraduate thesis is designed to improve the efficiency of graduation design management and simplify the management process. It is a good reference example for the education management administrative divisions in universities.

**Index Terms**—undergraduate thesis; task management tool; education management

## I. INTRODUCTION

The main purpose of the university undergraduate thesis is to train students to comprehensively apply for the knowledge and skills they have learned, to connect theory with practice, to analyze independently, and to solve practical problems so that students can get engaged in the professional work and carry out relevant basic training. The undergraduate thesis should reflect that the author can accurately grasp the basic knowledge of the majors he has learned, and basically learn how to use the knowledge he has learned to conduct scientific research. He has a certain understanding of the topics who has studied.

The tasks of each university undergraduate thesis have a fixed cycle and process, but the time span lasts 8 months, spanning 2 connected years, including 1 Chinese Spring Festival in winter holiday, so the tutor, students and the education management administrative divisions can be easily lost in the time, so they continuously check the undergraduate thesis management documents which is cumbersome sometimes may lead to some mistakes.. The design study of a task management tool for undergraduate thesis is necessary.

Therefore, to carry out optimization research of undergraduate thesis management workflow will be important to improve the quality of graduation design and the educational administration management efficiency, ensure the entire graduate teaching quality and the realization of high-quality personnel training objectives [1,2].

## II. MATERIAL AND METHODS

A task management tool for undergraduate thesis is shown in Figure 1, and the side-view of a task management tool is shown in Figure 2, which includes an upper turntable and a lower turntable. There are holes in

the middle of the upper turntable and the lower turntable, which are connected through holes through a short bolt. The upper turntable is opaque material and has a gap. The upper and lower turntables are round, and the upper and lower turntables can be made of paper or plastic to reduce weight and carry easily. The time and the task content of undergraduate thesis are printed on the next turntable, as show in Figure 3.

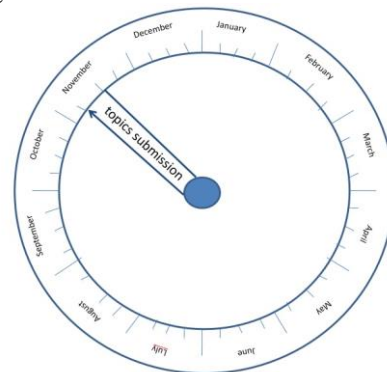


Figure 1. A task management tool for undergraduate thesis.

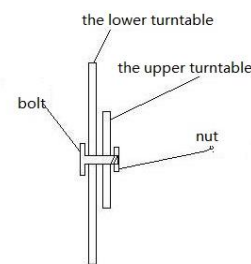


Figure 2. The side-view of a task management tool.



Figure 3. The lower turntable.

The date is printed on the outer edge of the turntable in turn, and the date is the period of the whole thesis. The task of undergraduate thesis that should be completed in that time is printed on the inner side of the corresponding turntable near the circular hole of each date. The diameter of upper turntable is smaller than that of lower turntable. The size of the lower turntable is set on the date set around the outer edge of the lower turntable, which can exactly cover the paper task set around the small hole of the lower turntable mentioned in the residence, and will not cover up the paper task set around the outer edge of the lower turntable described in the residence. When the upper turntable is rotated in this way, all date contents of the lower turntable will not be covered by the upper turntable. The upper turntable has a notch, which is approximately rectangular, from the central hole position of the upper turntable to the edge of the upper turntable. As shown in Figure 4, the content of the thesis of the lower turntable can be displayed through the notch. As shown in Figure 5, the upper notch shows the tasks that the undergraduate thesis should perform on the corresponding date. Short bolts pass through small holes to connect the upper and lower turntables. By matching nuts, the two turntables are compacted together. When the nuts and bolts are tightened, the upper and lower layers can rotate flexibly. The bolt connection is convenient for disassembly, so that the new lower layers can be replaced when the task of graduation thesis changes. Referring to the content of undergraduate thesis, for example, there are 12 stages in the whole undergraduate thesis cycle: in November current year, there are topics submission, college approval, in December current year, there are the two-way choice between teachers and students, the second selection of topics, in January next year, there is issuing task contents, in February next year, there is preparing for dissertation proposals, in March next year, there is completing the dissertation proposals, in April next year, there is mid-term inspection, in May next year, there is academic misconduct testing, in June next year, there are college oral defense, higher-level evaluation, finally in July next year, there is score recording. This tool will effectively enhance the awareness of undergraduate thesis time management of University graduates, and improve the efficiency of undergraduate thesis management of university education management administrative divisions.

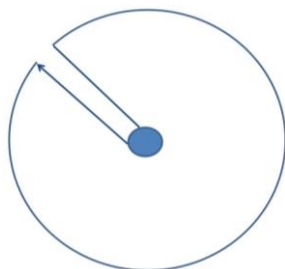


Figure 4. The upper turntable.

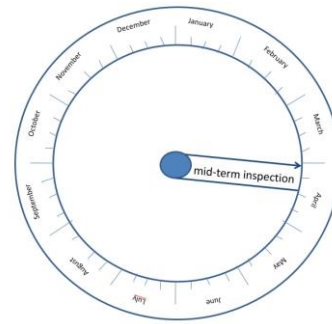


Figure 5. The rotation of the turntables.

### III. CONCLUSION

The utility model provides a task management tool for undergraduate thesis, which has two upper and lower turntables, circular, rectangular notches on the upper turntable and small holes in the middle of the two turntables. Through a short bolt, the upper and lower turntables can rotate flexibly when the nuts and bolts are tightened. The bolt connection is convenient for disassembly, so that the new lower turntable can be replaced when the task of undergraduate thesis changes. When rotating the upper and lower turntables, the gap between the upper and lower turntables shows the tasks that should be carried out in the undergraduate thesis on the corresponding date. The tool will effectively enhance the awareness of undergraduate thesis time management of college graduates, and improve the undergraduate thesis management efficiency of education management administrative divisions in universities.

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