Study Aid Tool - Group 27 BACK PACS

Aiden Burgess - abur970 - 600280511

Abstract—This document is a model and instructions for LaTeX. This and the IEEEtran.cls file define the components of your paper [title, text, heads, etc.]. *CRITICAL: Do Not Use Symbols, Special Characters, Footnotes, or Math in Paper Title or Abstract.

Index Terms—component, formatting, style, styling, insert

I. INTRODUCTION

A. Motivation

Students need to remove all distractions to study effectively. However, the process of setting up a relaxing environment for a session of focused work can be tedious and repetitive. Many students prefer to study with music in the background and with a nice wallpaper. When working on large problems or many problems, they like to break them down into smaller tasks in a todo list. It has become increasingly popular to use time-boxed techniques to maximise efficiency and focus, such as Pomodoro. Therefore, students may need to juggle many apps simultaneously, which can be distracting and annoying.

A unique feature that the team thought would be worthwhile to introduce is the ability to change the background and music based on the user's current mood.

B. Goals

The goals for this project were separated by priority into must-haves, should-haves, could-haves, and nice-to-haves. The list of proposed goals for the project can be found in Table 1.

As a summary, the main goals for the project was the mood-based functionality, which interacted with the background and music, and the todo list. These were chosen as the main goals because the unique feature of a mood.... The todo list is one of the most important components needed when a student is studying as it allows them to track their goals and progress for the study session.

With the same reasoning, white noise and a timer were should have functionality, as they aid a user's study.

II. RELATED WORK

What has been done before? Compare it with your project.

III. DESIGN

Software architecture (e.g. class diagram)? User interface (e.g. screen diagram)? Why this design?

IV. IMPLEMENTATION

What have we implemented?

V. TESTING

How have we tested?

TABLE I
PROJECT GOALS.

Feature	Time Estimate (Hours)	Feature Description and Estimate Justification
Must-Haves		
Mood based music player and recommendations	20	Get moods/preference from a mood slider and generate a playlist using the Spotify API that can be played in the browser.
Mood backgrounds	12	Generate some backgrounds based on the mood sliders/settings. Uses the splash API to retrieve backgrounds based on the search term. Create a slideshow with customisable interval.
Todo list	10	The ability to add items to a todo list which can help the user keep track of their progress. Does not use third-party tools.
Should-Haves		
White noise	8	A feature that will generate white noise for the user to aid in their study. Simple white noise audio file that can play/pause. Reuse styling from the music recommender above.
Timer	6	A timer that can countdown and allow the user to keep track of time and perhaps implement study strategies like Pomodoro.
Could-Haves		
Whiteboard	8	A whiteboard that the user can use to draw and save some of the images to help with their study. Use Third party components.
Study statistics	15	Statistics that summarise the user's music time, study time, items added and completed. This can be used to help the student with seeing how much progress they are making.
User accounts	20	User accounts which remember the user's preferences, with login details, and the ability to access preferences from multiple accounts. Using a database over local storage.
Nice-To-Haves		
Music recommendations based on weather	10	Get the user location, and weather, then give a music recommendation using the Music Player already implemented.
Inspirational messages	5	Generating inspirational messages using API to display.

VI. Methodology

VII. Discussion

Have the goals been achieved? Problems?

VIII. Conclusion

Conclusions? Lessons? Future work?

The class file is designed for, but not limited to, six authors. A minimum of one author is required for all conference articles. Author names should be listed starting from left to right and then moving down to the next line. This is the author sequence that will be used in future citations and by indexing services. Names should not be listed in columns nor group by affiliation. Please keep your affiliations as succinct as possible (for example, do not differentiate among departments of the same organization).

A. Identify the Headings

Headings, or heads, are organizational devices that guide the reader through your paper. There are two types: component heads and text heads.

Component heads identify the different components of your paper and are not topically subordinate to each other. Examples include Acknowledgments and References and, for these, the correct style to use is "Heading 5". Use "figure caption" for your Figure captions, and "table head" for your table title. Run-in heads, such as "Abstract", will require you to apply a style (in this case, italic) in addition to the style provided by the drop down menu to differentiate the head from the text.

Text heads organize the topics on a relational, hierarchical basis. For example, the paper title is the primary text head because all subsequent material relates and elaborates on this one topic. If there are two or more sub-topics, the next level head (uppercase Roman numerals) should be used and, conversely, if there are not at least two sub-topics, then no subheads should be introduced.

B. Figures and Tables

a) Positioning Figures and Tables: Place figures and tables at the top and bottom of columns. Avoid placing them in the middle of columns. Large figures and tables may span across both columns. Figure captions should be below the figures; table heads should appear above the tables. Insert figures and tables after they are cited in the text. Use the abbreviation "Fig. 1", even at the beginning of a sentence.
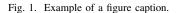

Fig. 1. Example of a figure caption.

Figure Labels: Use 8 point Times New Roman for Figure labels. Use words rather than symbols or abbreviations when writing Figure axis labels to avoid confusing the reader. As an example, write the quantity "Magnetization", or "Magnetization, M", not just "M". If including units in the label, present them within parentheses. Do not label axes only with units. In the example, write "Magnetization (A/m)" or "Magnetization {A[m(1)]}", not just "A/m". Do not label axes with a ratio of quantities and units. For example, write "Temperature (K)", not "Temperature/K".

Acknowledgment

The preferred spelling of the word "acknowledgment" in America is without an "e" after the "g". Avoid the stilted expression "one of us (R. B. G.) thanks ...". Instead, try "R. B. G. thanks...". Put sponsor acknowledgments in the unnumbered footnote on the first page.

References

Please number citations consecutively within brackets [1]. The sentence punctuation follows the bracket [2]. Refer simply to the reference number, as in [3]—do not use "Ref. [3]" or "reference [3]" except at the beginning of a sentence: "Reference [3] was the first ..."

Number footnotes separately in superscripts. Place the actual footnote at the bottom of the column in which it was cited. Do not put footnotes in the abstract or reference list. Use letters for table footnotes.

Unless there are six authors or more give all authors' names; do not use "et al.". Papers that have not been published, even if they have been submitted for publication, should be cited as "unpublished" [4]. Papers that have been accepted for publication should be cited as "in press" [5]. Capitalize only the first word in a paper title, except for proper nouns and element symbols.

For papers published in translation journals, please give the English citation first, followed by the original foreign-language citation [6].

References

[1] G. Eason, B. Noble, and I. N. Sneddon, "On certain integrals of Lipschitz-Hankel type involving products of Bessel functions," Phil. Trans. Roy. Soc. London, vol. A247, pp. 529–551, April 1955.

[2] J. Clerk Maxwell, A Treatise on Electricity and Magnetism, 3rd ed., vol. 2. Oxford: Clarendon, 1892, pp.68–73.

[3] I. S. Jacobs and C. P. Bean, "Fine particles, thin films and exchange anisotropy," in Magnetism, vol. III, G. T. Rado and H. Suhl, Eds. New York: Academic, 1963, pp. 271–350.

[4] K. Elissa, "Title of paper if known," unpublished.

[5] R. Nicole, "Title of paper with only first word capitalized," J. Name Stand. Abbrev., in press.

[6] Y. Yorozu, M. Hirano, K. Oka, and Y. Tagawa, "Electron spectroscopy studies on magneto-optical media and plastic substrate interface," IEEE Transl. J. Magn. Japan, vol. 2, pp. 740–741, August 1987 [Digests 9th Annual Conf. Magnetics Japan, p. 301, 1982].

[7] M. Young, The Technical Writer's Handbook. Mill Valley, CA: University Science, 1989.

text from your paper may result in your paper not being published.