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**IMPLEMENTASI ALGORITMA GREEDY  
UNTUK PERMAINAN OTHELLO**

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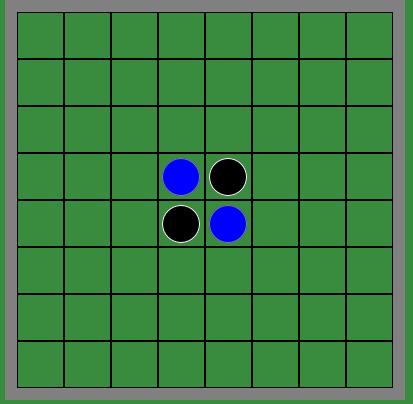
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***Abstrak*-**Algoritma Greedy merupakan metode yang sering digunakan/populer untuk memecahkan masalah dalam optimasi.Secara Bahasa greedy memiliki arti serakah.Dimana dia akan mengambil sebanyak banyaknya tanpa memikirkan kosekuensi yang akan di dapat di masa yang akan datang.Meiliki prisip : “Take What You Can Get Now”.Dan algoritam ini dapat di gunakan untuk membangun sebuah game Othello atau bisa disebut revisi.

***Kata kunci***- *Greedy,Othello,optimasi*

1. **Pendahuluan** 
   1. **Peraturan permainam**

****Permainan ini dimainkan dengan papan yang berukuran 8 x 8 yang miliki jumlah 64 kolom yang dimainkan menggunakan 2 bidak yang meiliki warna atau bentuk yang berbeda dan dimainkan oleh 2 player,diawal permainan setiap player memiliki 2 bidak dengan warna yang saam dan juga di letakan saling bersebrangan.

**Gambar 1.Tampilan awal permainan dalam game Othello**

Atruan permainan jika bidak lawan di ampit oleh bidak kita maka bidak lawan tersebut akan berubah waran dan akan menjadi bidak kita,player hanya bisa meletakan bidak jika kondisi mengapit bidak lawan selain itu tidak bisa meletakan bidaknya.Dan kedua player akan bergantian untuk meletakan bidak bidak mereka.Dimana untuk melihat siapa yang memenangkan game ini kita bisa lihat dari perolehan bidak masing masing player,game berhenti jika semua kolom dalam

papan sudah penuh atau kedua player tidak bisa menggerakan bidaknya.

* 1. **Sekema Umum dalam Algoritma Greedy**

Algoritma Greedy merupakan metode yang sering dan populer untuk digunakan dalam memecahkan masalah optimasi.Algoritma greedy sendiri membentuk solusi langkah perlangkah.Pendekatan yang digunakan dalam algoritma greedy adalah membuat pilihan yang tampak memberi pilihan yang terbaik, maksutnya awal-awal dengan mebuuat optimum local terlebih dahulu terus kita membuat optimum global pada akhir proses.

Persoalan optimasi dalam konteks algoritma greedy disusun oleh elemen-elemen sebagai berikut

1. Himpunan Kandidat,C.

Himpunan ini berisi elemen elemen pembentuk solusi,pada setiap langkah.

1. Himpuanan Solusi, S.

Himpunan ini berisi kandidat kandidat yang terpilih sebagai solusi persoalan.Dengan kata lain,himpunan solusi berisi himpunan kandidat

1. Fungsi Seleksi

Fungsi ini dinyatakan dengan predikat seleksi.

Merupakan fungsi yang ada setiap langkah memilih kandidat yang paling memungkinkan mencapai sebuah solusi optimal.Kandidat yang sudah dipilih pada suatu langkah tidak pernah dipertimbangkan lagi pada langkah selanjutnya .

1. Fungsi Kelayakan

Fungsi ini dinyatakan dengan predikat layak.

Fungsi kelayakan ini merupakan fungsi yang memeriksa apakah suatu kandidat yang telah di pilih dapat memberikan solusi yang layak.Kandidat tersebut Bersama sama dnegan himpunan solusi yang sudah terbentuk tidak melanggar Batasan/aturan yang ada.

1. Fungsi Objektif yang memaksimumkan atau meminimumkan nilai solusi.

Now it is the time to articulate the research work with ideas gathered in above steps by adopting any of below suitable approaches:

*A. Bits and Pieces together*

In this approach combine all your researched information in form

of a journal or research paper. In this researcher can take the

reference of already accomplished work as a starting building

block of its paper.

Jump Start

This approach works the best in guidance of fellow researchers. In this the authors continuously receives or asks inputs from their fellows. It enriches the information pool of your paper with expert comments or up gradations. And the researcher feels confident about their work and takes a jump to start the paper writing.

Identify the constructs of a Journal – Essentially a journal consists of five major sections. The number of pages may vary depending upon the topic of research work but generally comprises up to 5 to 7 pages. These are:

1. Abstract
2. Introduction
3. Research Elaborations
4. Results or Finding
5. Conclusions

**In Introduction you can mention the introduction about your research.**

II. IDENTIFY, RESEARCH AND COLLECT IDEA

It's the foremost preliminary step for proceeding with any research work writing. While doing this go through a complete thought process of your Journal subject and research for it's viability by following means:

1. Read already published work in the same field.
2. Goggling on the topic of your research work.
3. Attend conferences, workshops and symposiums on the same fields or on related counterparts.
4. Understand the scientific terms and jargon related to your research work.
   1. *Use of Simulation software*

There are numbers of software available which can mimic the process involved in your research work and can produce the possible result. One of such type of software is Matlab. You can readily find Mfiles related to your research work on internet or in some cases these can require few modifications. Once these Mfiles are uploaded in software, you can get the simulated results of your paper and it easies the process of paper writing.

As by adopting the above practices all major constructs of a research paper can be written and together compiled to form a complete research ready for Peer review.

IV. GET PEER REVIEWED

Here comes the most crucial step for your research publication. Ensure the drafted journal is critically reviewed by your peers or

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any subject matter experts. Always try to get maximum review comments even if you are well confident about your paper.

**For peer review send you research paper in IJSRP format to** [**editor@ijsrp.org.**](mailto:editor@ijsrp.org)

V. IMPROVEMENT AS PER REVIEWER COMMENTS

Analyze and understand all the provided review comments thoroughly. Now make the required amendments in your paper. If you are not confident about any review comment, then don't forget to get clarity about that comment. And in some cases there could be chances where your paper receives number of critical remarks. In that cases don't get disheartened and try to improvise the maximum.

**After submission IJSRP will send you reviewer comment within 10-15 days of submission and you can send us the updated paper within a week for publishing.**

This completes the entire process required for widespread of research work on open front. Generally all International Journals are governed by an Intellectual body and they select the most suitable paper for publishing after a thorough analysis of submitted paper. Selected paper get published (online and printed) in their periodicals and get indexed by number of sources.

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VI. CONCLUSION

A conclusion section is not required. Although a conclusion may review the main points of the paper, do not replicate the abstract as the conclusion. A conclusion might elaborate on the importance of the work or suggest applications and extensions.

APPENDIX

Appendixes, if needed, appear before the acknowledgment.

ACKNOWLEDGMENT

The preferred spelling of the word “acknowledgment” in American English is without an “e” after the “g.” Use the singular heading even if you have many acknowledgments.

REFERENCES

1. G. O. Young, “Synthetic structure of industrial plastics (Book style with

paper title and editor),” in *Plastics*, 2nd ed. vol. 3, J. Peters, Ed. New York: McGraw-Hill, 1964, pp. 15–64.

[2] W.-K. Chen, *Linear Networks and Systems* (Book style)*.* Belmont, CA:

Wadsworth, 1993, pp. 123–135.

1. H. Poor, *An Introduction to Signal Detection and Estimation*. New York: Springer-Verlag, 1985, ch. 4.
2. B. Smith, “An approach to graphs of linear forms (Unpublished work style),” unpublished.
3. E. H. Miller, “A note on reflector arrays (Periodical style—Accepted for publication),” *IEEE Trans. Antennas Propagat.*, to be published.
4. J. Wang, “Fundamentals of erbium-doped fiber amplifiers arrays (Periodical style—Submitted for publication),” *IEEE J. Quantum Electron.*, submitted for publication.

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