Advanced Algorithms and Parallel Programming Spring 2018

Advanced Algorithms Project

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- 2 Implementation of the Project
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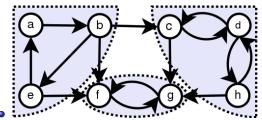


Figure: Graph with strongly connected components

Tarjan's Algorithm

- Tarjan's Algorithm
 - Time Complexity $\rightarrow O(|V| + |E|)$

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 - Generate a Random Directed Graph with options (Python)
 - Question Experiement with algoritmhs while keeping track of completion time and storage consumption (tarjan vs. Nuutila vs. Pearce)
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 - Visualization of the experiments, can only be done with cvs files (Python).

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- Visualization of the experiment is done with python, csv files can be further explored using the provided jupyter notebook.

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- StorageItems struct is used by all algorithm classes to transfer the execution data



Figure: The main screen of the Application

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title



test