Final Project Announcement

Dead or Alive
Requirements

15 min Presentation (10%)

Report (10%)
Project

- Team members
  - 1 ~ 5 members a team

- Topics
  - Choose one of topics on class website
  - Propose by yourself
## Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/24</td>
<td>Send team member list</td>
</tr>
<tr>
<td>5/31</td>
<td>Send topic</td>
</tr>
<tr>
<td>6/12 ~ 6/13</td>
<td>First presentation &amp; Review</td>
</tr>
<tr>
<td>6/14</td>
<td>Special presentation &amp; Vote</td>
</tr>
<tr>
<td>6/26 ~ 6/27</td>
<td>Second presentation</td>
</tr>
<tr>
<td>7/2</td>
<td>Final report</td>
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</tbody>
</table>
Presentation & Report

• What are the data structures used?
  – Construction, operations, complexity

• What are the problems related to the data structure?

• What are the motivations to study the problem?
Presentation & Report

• How to use the data structure to solve the problem?

• What are the experiment performance of the data structure? (Optional)

• Is it possible to do better?
Simple Example

- **Topic:** Binary Search Tree
- **Motivation**
  - Sorting is an important problem. Data can be found faster if they are sorted. We use binary search tree to help us sort numbers.
- **Problem Definition**
  - Given a sequence of numbers $A[1..n]$, rearrange $A$ to get $B$, such that $B_i \leq B_{i+1}$ for $1 \leq i \leq n$. Output $B$. 
Simple Example

• Data Structure

  ...

• Sorting by BST

  ...

• Conclusion
  
  – … If we can restrict the height of binary search tree, then we may sort numbers more efficiently.
Communication

• Send team member list
  – Send to fhliu@cs.nthu.edu.tw
  – Team name, student id & name of members, team e-mail address

• Send topic
  – Send to fhliu@cs.nthu.edu.tw
  – Team name, topic
Communication

• Choose presentation time
  – Receive possible presentation time
  – Choose time and reply

• Send final report
  – Send to all the tutors
Language

• Use English or Chinese for presentation and report

• But use English for the slides of presentation