BOOK MONITORING SYSTEM

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PROBLEM

- Employee Dependence
- Sequential Scanning
- Slowly System
PROPOSITION

- Book Monitoring System
  - RFID Technology
  - Web Application
    - Catalog search
    - Renewal
    - Reservation
    - Lease status
  - Self check-in/check-out
DELIVERABLES

- User interface for:
  - Administrator
  - Employee
  - Customer (book user)

- Database to retain information of users and books

- Prototype of a check-out / check-in station for the library
OBJECTIVES

- Provide an initial prototype of both hardware and software individually with a progress report by October 29, 2008.
- Provide a complete working prototype of the system with a final report for December 1, 2008.
MILESTONES

9/10/08
• Project Proposal & Oral Presentation I

10/15/08
• Oral Exam I & Prototype I

10/29/08
• Progress Report & Oral Presentation II

11/5/08
• Oral Exam II & Prototype II

11/26/08
• Oral Exam III & Prototype III

12/1/08
• Final Report & Final Presentation
PROTOTYPES

- Prototype I
  - Interface between Microcontroller and RFID Module
  - Visual Interface
  - Database ER and general tables
- Prototype II
  - Database Testing
  - Web Application under development
  - Interface between Microcontroller and computer station
- Prototype III
  - Working system
TEAM ORGANIZATION

- BMS

Hardware

Software

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## BUDGET

### Overall Cost

<table>
<thead>
<tr>
<th>Category</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Employment Cost</td>
<td>$32,682.00</td>
</tr>
<tr>
<td>Total Hardware &amp; Software Cost</td>
<td>$1,177.02</td>
</tr>
<tr>
<td>Indirect &amp; Overhead Cost</td>
<td>$20,271.82</td>
</tr>
<tr>
<td><strong>Total Project Cost</strong></td>
<td><strong>$54,630.84</strong></td>
</tr>
</tbody>
</table>

- **Total Employment Cost**: 38%
- **Total Hardware & Software Cost**: 2%
- **Indirect & Overhead Cost**: 2%

**Total Project Cost**: $54,630.84
RISKS & CONTINGENCY PLAN

- Components unavailable
- Changes in requirements
- Data lost or damaged
- Hardware damaged
- Member lost
PROJECT IMPACTS

- Legal
  - Licenses Issues
  - Copyright & Distribution Issues
- Environmental
  - Reduction of Hazardous Substances (RoHS) Complaint
- Social
  - People lifestyle
Competition

- 3M™
- Checkpoint®

<table>
<thead>
<tr>
<th>BMS</th>
<th>3M™ &amp; Checkpoint® Partnership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check-in station</td>
<td>Check-in station</td>
</tr>
<tr>
<td>Check-out station</td>
<td>Check-out station</td>
</tr>
<tr>
<td>Book renewal and reservation</td>
<td>Shelf scanner to organize books</td>
</tr>
</tbody>
</table>
CONCLUSION

- Prototype of BMS
  - Cost $54,630.84
  - November 26, 2008
QUESTIONS?