Global PBL on IoT at HCMUT, Vietnam

Global PBL on IoT was held at HCMUT, Vietnam, from September 8 to September 16 in 2017, hosted by Faculty of Computer Science and Engineering. The purposes of this PBL were, (1) to understand what IoT is, (2) to find issues on IoT, (3) to propose the solutions to the issues, (4) to build systems based on the proposals, (5) to evaluate the systems and finally (6) to make the presentations. The keys of IoT are microcomputers and sensors. Therefore, several Arduino devices and sensors were brought to HCMUT from SIT, and some other sensors were bought in the field.

17 students from SIT, 16 students from HCMUT, teaching assistants (TAs), faculty members, staff members and other support staff members from both universities participated in the PBL. Furthermore, the rector and external relations office members from HCMUT joined the opening ceremony. Besides SIT and HCMUT people, a professor of Tokyo University of Science, Suwa and some people from companies attended the PBL as observers. In total, 62 people were involved in the PBL.

The participated students were divided into 7 groups. Every group proposed a unique and intriguing idea, and developed the prototype system. In addition to the system development activity, a “Cu Chi Tunnel tour” was conducted as a cultural exchange.

As a whole, this Global PBL was successful and the participants achieved their goals as well as brushing up their English communication skills.

Schedule at a glance

<table>
<thead>
<tr>
<th>Date</th>
<th>A.M.</th>
<th>P.M.</th>
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<tbody>
<tr>
<td>Sep. 7 Thu.</td>
<td>Departure from NRT</td>
<td>Arrivial at HCMC</td>
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<tr>
<td>Sep. 8 Fri.</td>
<td>Opening Ceremony, Ice Breaking+Welcome party</td>
<td>PBL (Guidance)</td>
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<tr>
<td>Sep. 9 Sat.</td>
<td>PBL (Finding issues)</td>
<td></td>
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<tr>
<td>Sep. 10 Sun.</td>
<td>Day off</td>
<td></td>
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<tr>
<td>Sep. 11 Mon.</td>
<td>Culture exchange - Cu Chi Tunnel Tour -</td>
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<tr>
<td>Sep. 12 Tue.</td>
<td>PBL (Discussion - proposal -)</td>
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<tr>
<td>Sep. 13 Wed.</td>
<td>PBL (Discussion- system development -)</td>
<td></td>
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<tr>
<td>Sep. 14 Thu.</td>
<td>PBL (Discussion- system development -)</td>
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<tr>
<td>Sep. 15 Fri.</td>
<td>PBL (Presentation)</td>
<td>PBL presentation, Farewell party</td>
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<tr>
<td>Sep. 16 Sat.</td>
<td>PBL (Summary), Closing Ceremony</td>
<td>Departure from HCMC</td>
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<tr>
<td>Sep. 17 Sun.</td>
<td>Arrival at NRT</td>
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Group photo at opening ceremony
Brainstorming and discussion in each group

Examples of system development
Cu Chi Tunnel tour as a cultural exchange

Final presentations
Farewell party at Ngoc Lan restaurant

Group photo at closing ceremony
<table>
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<tr>
<th>Name of PBL</th>
<th>Global PBL on IoT</th>
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<tr>
<td>Date</td>
<td>From September 8 to September 16</td>
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<tr>
<td>Venue</td>
<td>Faculty of Computer Science and Engineering, HCMUT</td>
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</table>

**Cultural exchange tour**

- Cu Chi Tunnel

**Participants from SIT**

- 17 students (from B1 to B4)
  - Communications Engineering: 10 students
  - Information Science and Engineering: 5 students
  - Electrical Engineering: 1 student
  - Engineering and Design: 1 student
- 2 TAs (master course students)
  - Keish Usa (M2),
  - Shigeki Suwa (M1)
- 2 Faculty members
  - Eiji Kamioka
  - Hiroaki Fukuda
- 2 Escorting staff members
  - Daichi Tateiwa
  - Yuri Usami

**Participants from HCMUT**

- 16 students from CSE (B3)
- 4 TAs
  - Mr. Mai Duc Trung (researcher staff)
  - Mr. Nguyen Nhu Phuc (B5)
  - Mr. Tran Minh Triet (B4)
  - Mr. Tran Minh Chanh (B4)
- Rector
  - Prof. Vu Dinh Thanh
- 5 CSE faculty members
  - Prof. Thoai Nam (Dean)
  - Assoc. Prof. Dang Tran Khanh (Vice Dean)
  - Assoc. Prof. Pham Tran Vu (Vice Dean)
  - Assoc. Prof. Quan Thanh Tho
  - Dr. Tran Minh Quang
- 1 CSE staff member
  - Ms. La Hue Anh (Secretaly)
- 4 External Relations Office members
  - Assoc. Prof. Nguyen Danh Thao (Director)
  - Dr. Vo Dai Nhat (Vice director)
  - Ms. Nguyen Thi Pho
  - Ms. Nguyen Tran Nguyet Thu
- 2 Support staff members
  - Mr. Nguyen Dinh Nhut
  - Mr. Bui Xuan Giang

**Observer from Tokyo University of Science, Suwa**

- Prof. Masahide Ooshima

**Observers from Industries**

- 2 persons from Pascalia Asia
- 3 persons from Fujinet
- The total number of participants 62