Table 1: User evaluation consent form.
$\square$ I understand that this evaluation is used for purely research purposes.
$\square$ I understand that my participation is voluntarily and I Can withdraw if unwilling.
$\square$ I understand that my personal information such as name will be kept private.
$\square$ I understand that by writing my name in evaluation demographic form I give my consent to carry out I-Cuboid research evaluation process.

## Appendix A. User Consent, Demography, Evaluation Tasks, Raw SUS and QUIS Scores

Table 2: Required users' demographic details.

| \# | $\begin{gathered} \text { Age } \\ \text { (Years) } \end{gathered}$ | $\begin{aligned} & \text { Gender } \\ & (\mathrm{M} / \mathrm{F}) \end{aligned}$ | Occupation | Image Search Activity Time per Week | Image Search Experience (Years) | $\begin{gathered} \text { Preferred Im- } \\ \text { age } \\ \text { Search Tool } \end{gathered}$ | Topic |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 27 | F | PhD Student <br> + Teacher | Less than 1H | 15 | Google, Facebook | 3 |
| 2 | 26 | F | MPhil <br> dent Stu- | More than 9H | 10 | Google, Instagram, Facebook | 2 |
| 3 | 25 | F | MPhil Stu- dent | More than 9H | 15 | Google, Bing, PhotoBucket | 2 |
| 4 | 25 | F | Student <br> Housewife$+$ | Less than 1H | 8 | Google | 4 |
| 5 | 45 | M | Govt. Servant | Less than 1H | 10 | Google | 2 |
| 6 | 43 | F | Housewife | Less than 1H | Nil | Google | 3 |
| 7 | 23 | M | Under-Grad Student | Less than 1H | 4 | Google | 4 |
| 8 | 21 | F | Under-Grad <br> Student | 1-3H | 5 | Google, $\quad$ Insta- gram | 1 |
| 9 | 22 | F | Under-Grad Student | More than 9H | 6 | Google | 1 |
| 10 | 23 | M | Under-Grad <br> Student | Less than 1H | 7 | Google | 2 |
| 11 | 32 | M | IT Support | Less than 1H | 5 | Flicker | 3 |
| 12 | 27 | M | App oper Devel- | 1-3H | 10 | Google, Bing | 4 |
| 13 | 32 | F | Home Tutor | 1-3H | 15 | Google | 1 |
| 14 | 28 | M | Researcher | 1-3H | 5 | Google | 4 |
| 15 | 30 | M | Software <br> veloperDe- | None | Nil | Personal Photo Folder | 3 |
| 16 | 26 | M | Software Engineer | 1-3H | 4 | Google | 2 |

Table 3: Evaluation topics and tasks detail.

| Type | Topic | Goldfish in Bullet Trains in <br> Aquarium <br> Japan  | Fighter Aircraft in Pakistan | Indian Tiger |
| :---: | :---: | :---: | :---: | :---: |
| Guide Task | Step | Grid-based Presentation | Cube-based Presentation |  |
|  | 1 | Input query \{topic\} | Input query \{topic\} |  |
|  | 2 | Select an image in seventh row and third column on the grid. | Select second plane from the cube. |  |
|  | 3 | Select image in third row and fourth column of second plane. | Select image in third row and fourth column of second plane. |  |
|  | 4 | View details of the selected image. | View details of the selected image. |  |
|  | 5 | Download the selected image on your computer. | Download the selected image on your computer. |  |
|  | 6 | View the neighbors (left, right, top, and bottom) of the selected image. | View the neighbors (left, right, top, bottom, next, previous) of the selected image. |  |
|  | 7 | On the second page, select image in thirteenth row and sixth column. | Select any image from the neighbor images. |  |
|  | 8 | View details of the selected image. | View details of the selected image. |  |
|  | 9 | Download the selected image on your computer. | Download the selected image on your computer. |  |
| Unguided Task | 1 | Search \{topic\} | Search \{topic\} |  |
|  | 2 | Identify a pair of entities related to \{topic\} view its details, and download it on your computer from the first page. | Identify pair of entities related to \{topic \} by exploring all the planes of the cube, view the details of the identified image, and download it on your image. |  |
|  | 3 | Explore the neighbor images of the selected image. | Explore the neighbor images of the selected image. |  |
|  | 4 | Select the next page by clicking the next button. | Select the next cube by clicking the next button. |  |
|  | 5 | Identify an image containing a pair entity related to $\{$ topic $\}$ with white background, view its details, and download it on your computer from the second page. | Identify an image containing a pair entity related to \{topic\} with white background, view the details of the identified image, and download it on your computer. |  |
|  | 6 | Explore the neighbor images of the selected image. | Explore the neighbor images of the selected image. |  |

Table 4: Grid presentation system usability results.

| User/Q.No | Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Sum | Score Value |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 4 | 2 | 4 | 2 | 4 | 2 | 4 | 2 | 4 | 3 | 29 | 72.5 |  |  |  |  |  |  |
| 2 | 5 | 2 |  | 3 | 5 | 3 | 5 | 1 | 3 | 1 | 28 | 70 |  |  |  |  |  |  |
| 3 | 1 | 2 | 3 | 2 | 3 | 3 | 1 | 1 | 4 | 3 | 21 | 52.5 |  |  |  |  |  |  |
| 4 | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 2 | 4 | 2 | 24 | 60 |  |  |  |  |  |  |
| 5 | 3 | 2 | 4 | 1 | 2 | 2 | 4 | 2 | 5 | 1 | 30 | 75 |  |  |  |  |  |  |
| 6 | 4 | 1 | 4 | 3 | 5 | 1 | 5 | 1 | 5 | 4 | 33 | 82.5 |  |  |  |  |  |  |
| 7 | 5 | 1 | 5 | 1 | 5 | 1 | 5 | 1 | 5 | 1 | 40 | 100 |  |  |  |  |  |  |
| 8 | 5 | 1 | 5 | 1 | 4 | 1 | 5 | 1 | 4 | 1 | 38 | 95 |  |  |  |  |  |  |
| 9 | 4 | 1 | 5 | 3 | 4 | 2 | 5 | 1 | 5 | 2 | 34 | 85 |  |  |  |  |  |  |
| 10 | 4 | 2 | 5 | 1 | 4 | 3 | 4 | 2 | 5 | 1 | 33 | 82.5 |  |  |  |  |  |  |
| 11 | 4 | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 4 | 2 | 22 | 55 |  |  |  |  |  |  |
| 12 | 5 | 4 | 5 | 5 | 4 | 3 | 3 | 1 | 5 | 1 | 28 | 70 |  |  |  |  |  |  |
| 13 | 4 | 1 | 5 | 2 | 5 | 2 | 5 | 1 | 4 | 1 | 36 | 90 |  |  |  |  |  |  |
| 14 | 4 | 1 | 5 | 1 | 5 | 1 | 5 | 1 | 5 | 1 | 39 | 97.5 |  |  |  |  |  |  |
| 15 | 4 | 3 | 4 | 1 | 4 | 1 | 3 | 2 | 4 | 2 | 30 | 75 |  |  |  |  |  |  |
| 16 | 5 | 1 | 5 | 1 | 5 | 1 | 5 | 1 | 5 | 1 | 40 | 100 |  |  |  |  |  |  |
| 17 | 5 | 1 | 5 | 1 | 5 | 1 | 5 | 1 | 5 | 2 | 39 | 97.5 |  |  |  |  |  |  |
| 18 | 4 | 1 | 5 | 1 | 5 | 2 | 5 | 1 | 5 | 1 | 38 | 95 |  |  |  |  |  |  |
| Average Score |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Table 5: Cube presentation system usability scale results.

| User/Q.No | Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Sum | Score Value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 4 | 2 | 4 | 2 | 4 | 2 | 4 | 2 | 4 | 3 | 29 | 72.5 |
| 2 | 4 | 3 | 5 | 4 | 4 | 3 | 4 | 2 | 3 | 3 | 25 | 62.5 |
| 3 | 5 | 1 | 1 | 5 | 5 | 1 | 5 | 2 | 5 | 3 | 29 | 72.5 |
| 4 | 3 | 2 | 4 | 2 | 4 | 2 | 4 | 2 | 4 | 2 | 29 | 72.5 |
| 5 | 5 | 1 | 5 | 1 | 5 | 1 | 5 | 1 | 5 | 1 | 40 | 100 |
| 6 | 2 | 4 | 2 | 1 | 2 | 4 | 3 | 2 | 4 | 4 | 18 | 45 |
| 7 | 5 | 1 | 5 | 1 | 5 | 1 | 5 | 1 | 5 | 1 | 40 | 100 |
| 8 | 5 | 1 | 5 | 1 | 5 | 1 | 4 | 1 | 4 | 1 | 38 | 95 |
| 9 | 4 | 5 | 3 | 4 | 3 | 4 | 5 | 2 | 5 | 2 | 23 | 57.5 |
| 10 | 5 |  | 5 | 2 | 4 | 3 | 4 | 3 | 5 | 2 | 33 | 82.5 |
| 11 | 5 | 1 | 5 | 3 | 5 | 1 | 4 | 1 | 5 | 2 | 36 | 90 |
| 12 | 5 | 4 | 4 | 4 | 5 | 3 | 3 | 3 | 5 | 2 | 26 | 65 |
| 13 | 4 | 3 | 4 | 3 | 2 | 2 | 4 | 4 | 3 | 4 | 21 | 52.5 |
| 14 | 3 | 2 | 3 | 1 | 4 | 1 | 5 | 2 | 4 | 2 | 31 | 77.5 |
| 15 | 4 | 2 | 4 | 2 | 3 | 2 | 3 | 2 | 4 | 2 | 28 | 70 |
| 16 | 5 | 1 | 5 | 1 | 5 | 1 | 5 | 1 | 5 | 1 | 40 | 100 |
| 17 | 5 | 1 | 5 | 2 | 5 | 1 | 5 | 1 | 5 | 1 | 39 | 97.5 |
| 18 | 4 | 1 | 5 | 1 | 5 | 2 | 5 | 1 | 5 | 1 | 38 | 95 |
| Average Score |  |  |  |  |  |  |  |  |  |  |  |  |

Table 6: Grid presentation questionnaire for user interfaces satisfaction results.

| User/Type | Overall | Screen | Sys. Info. \& Ter. | Learning | Sys. Cap. | Average | Score Value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 8 | 8 | 8 | 7.7 | 8 | 7.9 | 88.1 |
| 2 | 8.4 | 8.3 | 7 | 8.2 | 6 | 7.6 | 84.2 |
| 3 | 5.5 | 3.8 | 4.8 | 4 | 4.4 | 4.5 | 50.1 |
| 4 | 6.7 | 6.3 | 6.7 | 6 | 4.2 | 6.0 | 66.3 |
| 5 | 6.8 | 5.5 | 6.2 | 7.7 | 7.8 | 6.8 | 75.3 |
| 6 | 9 | 8.8 | 9 | 9 | 9 | 9.0 | 99.6 |
| 7 | 9 | 9 | 9 | 9 | 9 | 9 | 100 |
| 8 | 8.3 | 9 | 7.3 | 8.8 | 9 | 8.5 | 94.4 |
| 9 | 8.7 | 8 | 5.7 | 8 | 8 | 7.7 | 85.2 |
| 10 | 8.3 | 8.3 | 7.8 | 8.7 | 8.8 | 8.4 | 93.2 |
| 11 | 1.2 | 2.8 | 2.3 | 3.3 | 1 | 2.1 | 23.7 |
| 12 | 7.7 | 6.3 | 8 | 8.5 | 6 | 7.3 | 81 |
| 13 | 8.7 | 8 | 8 | 8.5 | 8.3 | 8.3 | 92 |
| 14 | 6.8 | 9 | 9 | 9 | 9 | 8.6 | 95 |
| 15 | 7 | 7 | 7.5 | 7.3 | 7.4 | 7.3 | 80.56 |
| 16 | 9 | 9 | 8 | 8 | 8 | 8.4 | 93.3 |
| 17 | 8.8 | 8.5 | 8.8 | 8.8 | 8.8 | 8.8 | 97.2 |
| 18 | 8.5 | 8.8 | 75 | 9 | 8.2 | 8.5 | 93.9 |
| Average | 7.6 | 7.5 | 7.3 | 7.8 | 7.3 | 7.5 | 83.0 |
| Score Value | 84.1 | 83 | 80.8 | 86.1 | 80.8 | 83 | 83.0 |

Table 7: Cube presentation questionnaire for user interface satisfaction results.

| User/Q.No | Overall | Screen | Sys. Info. \& Ter. | Sys. Info. \& Ter. | Sys. Cap. | Average | Score Value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 6.8 | 7.3 | 7.0 | 7.5 | 8.0 | 7.3 | 81.3 |
| 2 | 7.4 | 8.0 | 6.3 | 6.8 | 5.4 | 6.8 | 75.3 |
| 3 | 5.5 | 7.3 | 8.3 | 8.0 | 7.6 | 7.3 | 81.6 |
| 4 | 7.2 | 7.5 | 7.6 | 6.8 | 6.0 | 7.0 | 77.8 |
| 5 | 8.5 | 8.5 | 8.2 | 9.0 | 9.0 | 8.6 | 96.0 |
| 6 | 1.3 | 2.3 | 2.3 | 2.0 | 5.8 | 2.7 | 30.4 |
| 7 | 9.0 | 9.0 | 9.0 | 9.0 | 9.0 | 9.0 | 100.0 |
| 8 | 8.7 | 9.0 | 7.6 | 9.0 | 9.0 | 8.7 | 96.1 |
| 9 | 6.0 | 7.7 | 8.5 | 4.0 | 2.0 | 5.6 | 62.6 |
| 10 | 8.3 | 8.3 | 8.2 | 8.5 | 8.4 | 8.3 | 92.6 |
| 11 | 9.0 | 9.0 | 9.0 | 9.0 | 9.0 | 9.0 | 100.0 |
| 12 | 7.3 | 7.3 | 7.7 | 8.0 | 6.8 | 7.4 | 82.2 |
| 13 | 6.7 | 5.0 | 6.0 | 5.2 | 7.0 | 6.0 | 66.3 |
| 14 | 7.0 | 6.7 | 9.0 | 8.8 | 9.0 | 8.1 | 89.8 |
| 15 | 7.7 | 7.3 | 7.3 | 6.7 | 7.2 | 7.2 | 80.2 |
| 16 | 9.0 | 9.0 | 8.0 | 8.0 | 8.0 | 8.4 | 93.3 |
| 17 | 8.8 | 9.0 | 8.8 | 8.7 | 8.8 | 8.8 | 98.0 |
| 18 | 8.5 | 8.8 | 8.0 | 9.0 | 8.2 | 8.5 | 94.3 |
| Average | 7.4 | 7.6 | 7.6 | 7.4 | 7.5 | c 7.5 | c 83.2 |
| Score Value | 81.9 | 84.3 | 84.6 | 82.6 | 82.8 | 83.2 | c 83.2 |

