READ ARTICLE MANAGEMENT IN DOCUMENT SEARCH PROCESS FOR NTCIR-9 VISEX TASK

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CONTENTS

- Event Collection Task
- TM2011 System
- Experimental Results
EVENT COLLECTION

TASK

- User task: Investigate & report situation about given topic
- 5 Topics (Topic 0 for training)
  - T0: Incidents all over the world where dinosaur fossils have been excavated.
  - T1: Airplane crashes that have happened in Asia.
  - T2: Incidents that have occurred at Japanese Nuclear Power Plants.
  - T3: Nuclear weapons tests that have been carried out by various countries.
  - T4: Incidents where NATO has recognized cases of friendly fire.
TARGET DOCUMENT & INFORMATION OF EACH EVENT

- Common: date & place
- T0: Name of excavation team, category, era of dinosaur found, value of findings
- T1: Airline company name, type of airplane, # of casualties, cause of crash
- T2: Outline of incident, damage
- T3: Outline of test, country carried out the test, reason
- T4: Outline of case (damaged facilities, # of casualties)
TM2001: DESIGN PRINCIPLE

- Aim of VisEx: Evaluate IR systems in context of explorative information access
- Focus on evaluation of single & simple function for supporting event collection task

Search result contains
- Unrelated documents
- Already collected events

Support for filtering such documents
Marking read/unread function

Assumption of user behavior
**VisEx检索系统**

**检索**

检索关键词，请输入。

<table>
<thead>
<tr>
<th>检索</th>
<th>Query term</th>
</tr>
</thead>
<tbody>
<tr>
<td>キーワード:</td>
<td></td>
</tr>
</tbody>
</table>

**检索选项**

显示件数: 20件 | 排序依据: | 排序顺序: 递增/递减顺序

**其他菜单**

<table>
<thead>
<tr>
<th>Sort by score/ release date</th>
</tr>
</thead>
</table>

**Similar to Baseline system**

**利用マニュアル**

本检索系统的方法关于的说明。

**既読記事一覧**

既读过文章一览。

**Ascending/descending order**
VisEx検索システム

検索

キーワード: 電報

表示件数: 20件  |  ソートキー: 時間降順  |  ソート順: 順

案内の検索結果

586件の検索が見つかりました。1番目から20番目を表示

次の20件を表示

米紙報道「当局はB2ステルス」——NATO軍、中国大規模発射

日付: 1999-05-11  [要約にする]

【ワシントン10日報道】 米紙ワシントン・ポストは10日（日本時間同日午後1時）東京で、中国の空を撃ち落としたと報じたB2ステルス爆撃機に関する記事を発表した。

【ワシントン10日報道】 中国大規模発射説明会

日付: 1999-05-11  [要約にする]

【ワシントン10日報道】 中国大規模発射説明会について

日付: 1999-05-11  [要約にする]

中国大使館発表 『当局はB2ステルス』——米紙報道 【大阪】
MARKING READ DISPLAY STYLE

(a) New article
- Boldface & background color

(b) Already retrieved
- Title only & grayed out
- Stored in read-article list
- Change to (b) by unread function

(c) Mark as read
USAGE OF MARKING READ FUNCTION

1. Articles to be included in a report are marked as read.

2. Articles related with already-included event in a report are marked as read without reading those.

3. Unrelated articles with target topic are marked read for improving readability of subsequent retrieval results.
OUTLINE OF EXPERIMENT

- Date: TM2011(2011.8.15), Baseline(2011.8.18)
- Between-subjects experiment design
- 1 hour for each topic (total 4 topics)
- Questionnaire
  - Before experiment … experience & skill of Web search & writing reports, interest in current issues
  - After each topic … impression about task (topic)
  - After experiment … impression about system & tasks
RESULTS: # OF EVENTS ANSWERED

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<tr>
<th>Topic</th>
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<th>Baseline</th>
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</table>
TM2011 only did not miss popular events.
USAGE OF MARK READ/UNREAD FUNCTIONS

- **Displayed (x10^2):**
  - M01: 10.2
  - M02: 10.2
  - M03: 8.6
  - F01: 5.7
  - F02: 5.7

- **Read**:
  - M01: 50
  - M02: 82
  - M03: 9
  - F01: 59
  - F02: 117

- **Unread**:
  - M01: 0
  - M02: 1
  - M03: 0
  - F01: 0
  - F02: 0

**Read-article list is not used for temporary purpose**
# Usage of Mark Read Functions / Topic

<table>
<thead>
<tr>
<th>Used in Report</th>
<th>Marked &amp; Used</th>
<th>Marked</th>
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# RELATION BETWEEN MARKING & SEARCHING ACTIONS

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<td>18</td>
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</tbody>
</table>
DISCUSSION

Mark read function is used for supposition 1): Articles to be included in a report are marked as read

Frequently observed behavior: Do next search JUST AFTER marking action

Marking read function as typical constituents of information access cycle
RESULTS OF QUESTIONNAIRES

- Experience & skill of Web search: Frequently used
- Interests in current issue: depends on users
- Familiarity of topics:
  - Familiar: 2, Unfamiliar: 4
  - No relation with performance of tasks?
- Overall impression of systems
  - TM2011 & Baseline: simple, easy to use, quick response
  - Marking functions: useful (M02, F01), although some problems
- Big difference between TM2011 & Baseline: # of new findings / surprises during tasks
# OF USERS WHO HAD NEW FINDINGS/SURPRISES

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
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<tbody>
<tr>
<td>Topic1</td>
<td>Topic2</td>
<td>Topic3</td>
<td>Topic4</td>
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</tbody>
</table>

- **TM2011**
- **Baseline**
CONCLUSION

- Result of Taking part in NTCIR-9 VisEx Task
- TM2011: marking read / unread functions
  - Usage of functions investigated based on log data
- Future works
  - Investigate usages of marking read functions other than supposition 1)