Informa Web
A Web-based Classroom Response System

Mattia Gustarini
Master Thesis Presentation
University of Lugano
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Blind Flight
Informa Web

Introduction

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Master Thesis

No or shallow feedback

Deep feedback

# students providing feedback

All students

No or few students

Blind Flight

Depth of feedback
Question
Question
# students providing feedback

<table>
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<tr>
<th>No or few students</th>
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**Blind Flight**

- No or shallow feedback
- Deep feedback

**Question**

- No or shallow feedback
- Deep feedback
Clicker
Clicker
Clicker
# students providing feedback
- All students
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**Clicker**
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**Question**
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**Blind Flight**

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**Question**

- Question
Informa Web

Informa Web
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Question

Depth of feedback
Informa Origins

- Software representation of Classroom Response System
- Desktop application (Java and RMI)
Informa Origins

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Informa Origins

- Software representation of Classroom Response System
- Desktop application (Java and RMI)

Scope
A Lecture
Collaboration

- Teacher Application
- Student Application
- Student Application
- Teacher Application
- Student Application
- Student Application
Collaboration
Time Travel

• First scenario (student)
  • Jim studies

• Second scenario (teacher)
  • Mauro wants to plan a lecture

• Impossible with the original Informa
Implementation

- Web application
- Server
  - Google App Engine
  - Scalable and distributed system
- Client
  - Google Web Toolkit
  - Rich users interaction
Main System Entities

- Course
- Session Plan
- Problem
- Active Session (more later)
- Old Session
Active Session
Single Problem execution

Students

Time
Active Session
Single Problem execution
Active Session

Single Problem execution

Students

Solve & Evaluate

Time
Active Session

Single Problem execution

Students

Solve & Evaluate

Time
Active Session

Single Problem execution

Students

Solve & Evaluate

Discuss

Time

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Active Session

Single Problem execution

Students

Solve & Evaluate  Discuss  Reveal

Time
Some features

• Users system
• Problem categories
• Session plan creation
• Active session
• Problem and Session plan versioning
• ...

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Problem and Session Plan versioning

- shared among all the teachers
- each teacher can create and edit them
- a new version is created every time they are edited
- versions tree
Problem and Session Plan versioning

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Pv1
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## Problem and Session Plan versioning

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Problem and Session Plan versioning

- **store**: Google App Engine datastore (BigTable - scalable)
- **present**: data pagination + search and filter capabilities
- **explore**: visually navigate the problem/plan history
Problem and Session Plan versioning

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Conclusions

• New teaching methodology
  • all students provide a deep feedback

• Collaboration

• Time travel

• http://informawebproto.appspot.com/

• More detailed information in the thesis document
Questions?
Questions?
Questions?
Questions?
Submitted solutions

<table>
<thead>
<tr>
<th>Submitted by</th>
<th>Feedback average</th>
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<tbody>
<tr>
<td>Guesta4faa9b</td>
<td>5.0</td>
</tr>
<tr>
<td>Guest70907e0</td>
<td>2.5</td>
</tr>
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Solution details

Solution from: Guesta4faa9b

Given the following class hierarchy:

```
interface I {...}
class A {...}
class B extends A implements I {...}
class C extends B {...}
```

And given the following objects:

```
a = new A;
b = new B;
c = new C;
```

Which of the following expressions are true?

- a instanceof I
- a instanceof A
- a instanceof B
- a instanceof C
- b instanceof I
- b instanceof A
- b instanceof B
- b instanceof C
- c instanceof I
- c instanceof A
- c instanceof B
- c instanceof C

Average confidence: 5.0

Confidence: ★★★★★ Send feedback

Questions?
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Questions?
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