Final Project & Evaluation Process

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Outline

- Project Selection and Workplan
- Exam Requirements
- Evaluation & Grading

Setting up the Project

- Project based Exam
- Team-up with classmates
  - No more than 3
  - Clear labor division
- Project Selection
  - Student Proposal
  - Staff Feedback (class)

Project Work Plan

- Proposal
  - Abstract & Wireframe Prototype
- **Important Dates:**
  - **Proposals for In-Class Proposal Review**
  - **April 23 – Submission (through easychair)**
  - **May 4 - Presentation in Class (Selected Proposals**

Project Topics

- Category taxonomy
  - Business
    - Interactive Agents
    - Augmented Reality
    - Examples at "unitnchannel" on YouTube
    - E-commerce
  - Education
    - Language Learning, On-Line learning (Math, …)
  - Finance
    - Calculators/Sheets, Wallets
  - Media & Video
    - Drawing, Monitoring, journalism

Project Topics (cont.d)

- Category taxonomy
  - Social
    - FB, Tweeter, Linkedin, Foursquare,
    - Chat applications
    - Media Monitoring (polls, etc..)
    - Group/Community Decision Making
    - Citizen services
  - Sports
    - Coaching, statistics, …
  - Travel & Local
    - Reviews, Tips, Reports, Hospitality

Project Topics (cont.d)

- Category taxonomy
  - Personal Health & Fitness
    - Pharmacy Locator, Encyclopedia, Q&A,
  - Games
    - Puzzles (tiles), ,
    - Gamification of human processes and workflows
      - Education
      - Business
      - Health

Project Topics (cont.d)

- For more ideas
  - Project from previous years
    - In youtube use keyword "lpsmt"
  - check student projects at www.cs76.net/
  - Market portfolios (Android and iOS)
    - Google Play
    - Itunes

Recommendations

- For your project plan to make use of
  - Sensors
    - Gyroscope , Accelerometer
    - Microphone/speakers
    - Camera
  - Bluetooth / Near Field Communication
  - Social platforms
  - Social Engagement
    - Group creation (sport, game, health ..)
    - Group collaboration (remote, mobile)
    - Group computing (making decision, ..)

Exam Requirements

- Project Report
  - Two-Page Write-up
    - Including Abstract & Wireframe
    - Will provide sample file
    - May include code snippets in appendix
- Code
- Video Presentation to be used on the day of the exam)

Report Doc Structure

Two-Page

1. Abstract
2. Related Work
3. Usage Model
4. Architecture Design
5. Implementation
6. Evaluation
7. Limitations
8. Team Members' Contribution
9. Lesson Learned
10. References

Project Selection

- Clearly state what is the app is going to do, the motivations
- Clearly state the user expectation, type and engagement
- Sketch ("wireframe") the app graphical layouts , transition btw activities and modus operandi for a stereotypical user.
- Generate 150 words description

Report Doc Structure

Abstract (150 words)

What is the problem you are trying to solve, what is your solution, why is your solution a good one, and why would users want to use it?

EXAMPLE 1 : Our app name is MathIsFun. We test users' math skills on different levels for basic and advanced operations (+,-,/,*, trigonometry etc..). We score each users for each math test sessions and generate a report to be shared with teacher or anyone. We make the sessions fun by giving feedback to the user on their performance, tips and motivate them with verbal or visual feedback. User groups may range from first grades to high-school students. Teachers and students are the intended recipients of the reports for evaluation and student progress tracking……

Report Doc Structure

Related Work (50 words)

What have others done that is similar or related to your project? What similar applications are there?

It's ok if you take similar applications and rework them changing their design/functionalities (e.g. Yet-another-microblogging-app)

What related applications are out there (not only mobile devices as well as desktop) ? Include citations for related work, which should include URLs if available. The citations and URLs should appear in a list of references at the end of the report.

Report Doc Structure

Usage Model (200 words)

Describe how a user is going to use your system. Think about this as like a user manual but not too much!. Goal and usage of the app should be clear within a few minutes. Describe the system from a user's perspective.

Include Wireframe screenshots

Report Doc Structure

Architecture Design (150 words)

Present the detailed design of your system. What key assumptions are you making about your system or the environment in which it will be used? The motivations for those assumptions being reasonable? What are the components, how do they fit together and talk to each another? Which protocols or platform features are you using?

Report Doc Structure

Implementation (150 words)

Which parts of your system are implemented? How were they implemented? What tools, libraries, classes did you use for doing the implementation?

Report Doc Structure

Evaluation (150 words)

What kind of testing have you done to validate your system? Have you tested on a real device or the emulator or both? What kind of optimizations did you do? Did real users try the system? What was their experience?

Report Doc Structure

Limitations (50 words) Optional

Describe any limitations with your design and implementation of the system.

Report Doc Structure

Team Members' Contribution (50 words)

Describe the contributions made by each team member to the project. Be specific and describe actual functions implemented by each team member, as well as the number of lines of code implemented by each team member.

Report Doc Structure

Lesson Learned (50 words). Optional

What did you learn? How would you do things differently if you did the project again?

References (50 words). Optional

Provide a list of references cited with complete bibliographic information including URLs where available.

Report

- Example

Video Presentation of Your Project

- During the exam we first play your video THEN
- We discuss your project, comment on your report and ask questions.
- See attached presentation on video scripting

Video Script
(3 minutes max video/audio)

- Title and Team Presentation (5%)
- The Pitch (5%)
- The Concept (10%)
- How it works (40%)
- Your Project Main Contribution (30%)
- Who did what in the team (5%)

My App Project

John Doe, Anne Stein
LPSMT Class 2014

The Team

Introduce Yourself (all team members)
First and Last Name

The Pitch

The Concept

How It Works

Interaction Scenario. You may use wireframe snapshots and comment it with Voice over

The Interaction Scenario

- Go through user interactions with you app
  - Scenario A, B, C, ..
- Show any customization process
- You may use wireframe snapshots and comment it with Voice over

Your Project Main Contributions

Your Contribution

- SW
  - Algorithm
  - Architecture
  - Interaction Design
  - Service Concept
- Database
- Evaluation

The Team

Who did What

The Team

- Who is in the team
- Who did What
- Which resources were used
  - Data
  - Third Party SW

Best Projects: Examples
VIDEOS

- Project Proposal
- Project Description
- Presentation

Grading and Recommendations

1. 30% Project Report & Presentation
2. 70% (Usage Model/Architecture Design/Implementation, Concept Idea, User Interface)
3. We are not looking necessarily for far-fetched and original ideas, rather well thought, designed, implemented and executed
4. **Refine concept and wireframe prototype by the end of March**
5. **Develop in April/May**

Project Proposal Submission

- Project Report
- Code
- Video presentation
- All of them have to be working PRIOR to the day of exam
- Upload on Project Review website
  - https://www.easychair.org/conferences/?conf=lpsmt2016