

# CS408 Computer Science Project Fall 2016

<http://an.kaist.ac.kr/courses/2016/cs408>

Lecture #1  
Logistics and Introduction

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# In ACM Curriculum 2016

- 2-semester-long capstone project with emphasis on
  - Teaming
  - Project management
  - Concurrent H/W and S/W design
  - System integration
  - Testing
  - Validation
  - Oral and written communication skills

# Our Goals

- Learn how to work as a team
- Experience the full cycle of software system design and implementation
- Improve documentation and presentation skills

# Team Selection

- Self-organize a team and notify 1pm on Tue, Sept. 6th
  - Max. 3 in a team
- If u r having a difficulty, come talk to instructors.

# Your Project

- Can be an improvement or a new design for existing systems and services. Unlike research projects, novelty is not important.
- Must be challenging enough for three people to work for 15 weeks.
- Must start with a good document that your team cannot proceed without.

# Project Selection

- 1st team meet with mentor on Wed, Sept 7th
- Mentors will be assigned randomly and assignments will be posted on KLMS
- On Sept 19th, 1min elevator pitch in class
- Until Wed, Oct 5th, your team can change projects. If you find other teams' ideas interesting, you may switch.



Week	Mon		Wed	
1	9/5	Logistics	9/7	Mentoring
2	9/12	Mentoring	9/14	Holiday
3	9/19	1 min Project Idea Pitching	9/21	Mentoring
4	9/26	Lecture	9/28	Mentoring
5	10/3	Holiday	10/5	Mentoring
6	10/10	Lecture	10/12	Mentoring
7	10/17	5min MOSP	10/19	Mentoring
8	10/24	No Class	10/26	No Class

Week	Mon		Wed	
9	10/31	Lecture	11/2	Mentoring
10	11/7	Mentoring	11/9	Mentoring
11	11/14	Lecture	11/16	Mentoring
12	11/21	Mentoring	11/23	Mentoring
13	11/28	Mentoring	11/30	Mentoring
14	12/5	Mentoring	12/7	Mentoring
15	12/12	1min EOSP + poster	12/14	No Class
16	12/19	No Class	12/21	No Class

# Deliverables

Due All deliverables are due by 9am on the date

9/19 1–page presentation material in PDF

10/5 Project document that states the motivation, problem statement, software requirement specifications, software architecture design, task management plan, milestones, workload split, schedule, final deliverable, demo plan, etc. English is not mandatory. It should be 20 pages or shorter.

10/17 5–min presentation

12/10 Poster in PDF

# Grading Policy

	%	Student?	
9/19 1min Elevator Pitch	5	Y	Best 3 teams by student votes get extra 1%
10/5 Project Document	20	N	Graded by professors and TAs
10/17 5min MOSP	15	Y	Best 3 teams by student votes get extra 1%
12/12 1min Elevator Pitch	5	Y	Best 3 teams by student votes get extra 1%
12/12 Poster Presentation	15	Y	Best 3 teams by student votes get extra 2%
Mentoring	32	N	About 12 weekly sessions
Attendance	8	N	Lecture Attendance

# Project Ideas from Naver

# Webtoon App (I)

- Develop an webtoon app to browse webtoons such as the Naver WebToon App.
- Expected manpower:
  - HTML5/CSS3/JavaScript developer: 1
  - Android or iOS developer: 1~2
  - Java/JSP/Tomcat/Apache developer (optional): 1
- Novelty in design and development is key
- Extra credits for improved user experience or functions
- Constraints:
  - Novelty in the code is essential. Simple reuse of existing code is not credited.
  - Design and contents of existing webtoons can be borrowed for the demo purpose, but distribution is prohibited.

# 웹툰 앱 개발 (I)

- 기존의 모바일 환경에서 서비스되고 있는 Naver WebToon 앱과 같은 웹툰 앱을 개발하는 과제로서 웹 서버를 통해 웹툰 content를 모바일 앱(Android, iOS)에서 볼 수 있는 애플리케이션을 개발한다.
- HTML5/CSS3/JavaScript 개발자 1명, Android 또는 iOS 개발자 1~2명, Java/JSP/Tomcat/Apache 개발자 1명(optional) 정도로 구성
- 기존의 웹툰 앱보다 더 좋은 사용자 경험이나 기능을 제공하면 가산점을 부여하고 직접 설계/개발한 내용을 중심으로 심사 진행.
- 제약 사항: 기존 코드를 그대로 사용하는 것은 인정 안하며 독창성이 있어야 함, 애플리케이션의 기획이나 디자인, contents는 기존 웹툰의 내용을 내부 데모 목적으로 활용할 수는 있으나 외부 재배포나 공개는 불가함.

# Web Browser for Android (II)

- Start with the stock browser open source in Android Open Source Project (AOSP) and develop a new web browser that offers an improved web browsing UX (user experience).
- Expected Manpower:
  - Android/Java developer: 2–3
  - HTML5/CSS3/JavaScript developer (optional): 1
- Extra credits for adding advanced features such as bookmarking, history, speed dial, etc. from Chrome browser and Opera browser
- Supported version: Android 4.1 or newer



# Android용 웹 브라우저 개발 (II)

- Android Open Source Project (AOSP)의 Stock 브라우저 오픈 소스를 개선하여 더 나은 웹 브라우징 경험을 제공할 수 있는 웹 브라우저 애플리케이션을 개발한다.
- Android/Java 개발자 2~3명, HTML5/CSS3/JavaScript 개발자 1명(optional)로 구성.
- Chrome browser, Opera browser 등 타사 브라우저의 advanced된 기능 (Bookmark, history, speed dial 등)들을 차용하거나 보다 혁신적인 기능들을 개발하는 경우에 가산 점 부여.
- 지원환경: Android 4.1 이상

# Camera App (III)

- Develop a camera application on Android or iOS
- Add features such as image filter and effects
- Expected manpower:
  - Android or iOS developer: 2~3
- Reuse of open source for image filters and effects is okay

# 카메라 애플리케이션 개발 (III)

- Android나 iOS 환경에서 사용할 수 있는 카메라 애플리케이션 개발.
- LINE Camera 등과 유사하게 카메라로 찍은 사진에 대한 image filter 적용, 효과 등 구현. 기타 이미지 편집 기능 등 제공
- Android 또는 iOS 개발자 2~3명
- 이미지 필터, 변환 등은 오픈 소스의 활용도 가

# Naver API-based App (IV)

- Any App using Naver API
- If any team is interested in this line of projects, we will arrange a lecture on how to use Naver API.

Questions?