



학생 여러분 반갑습니다.

다른 친구들이 입장할 때까지
조금 기다려 주십시오.

곧 모바일 프로그래밍 수업을
시작합니다.

음소거(🔇)가 되었는지 확인 바랍니다.

모바일 프로그래밍
화목(1,2교시)/ 화목(3,4교시)
정윤현 (AI/소프트웨어학부)

당부사항 I

의대원 수업 진행
→ 의대원 수업조사
1. 웹엑스 참여
2. 학교에서 웹엑스..?

- 학생 여러분과 가족 모두가 이 안 좋은 시기를 안전하고 건강하게 넘기기를 바랍니다.
- 교육의 질을 오프라인 수업에 못지 않게 유지하고자 모든 교수님들이 진지하게 고민하고 노력하십니다. 학생들의 적극적인 feedback 환영합니다.
- 수업 중에 뜻하지 않는 잡음이 생기게 되면, 음소거를 하고, 수업을 멈출테니 양해해 주시기 바랍니다.
- 수업 시간에 교수자 동의없이 녹음하는 것은 불법이오니 지양하길 바랍니다.

학교
→ 실습 시 보조 가능
온라인도 대응은 O

온라인 / 동교
→ 동교

→ 실습의 당일 과제 제출?

당부사항 II

- 여러 제약이 있으니 더 성실히 수업에 임할 것을 당부합니다.
- 출석체크는 수업시간 시작/종료 시점에 진행하겠습니다.
- 가급적 질문은 메일로 보내주세요. 개별적으로 답하거나 중요 사항은 수업시간 혹은 사이버 캠퍼스를 통하여 공유하겠습니다.



출석 체크 - 채팅 창 이용

- **지금**, 채팅 창에 본인의 학번, 이름을 아래와 같이 입력해 주세요.

- 학번 이름

- **예시 > 202034567 홍길동**

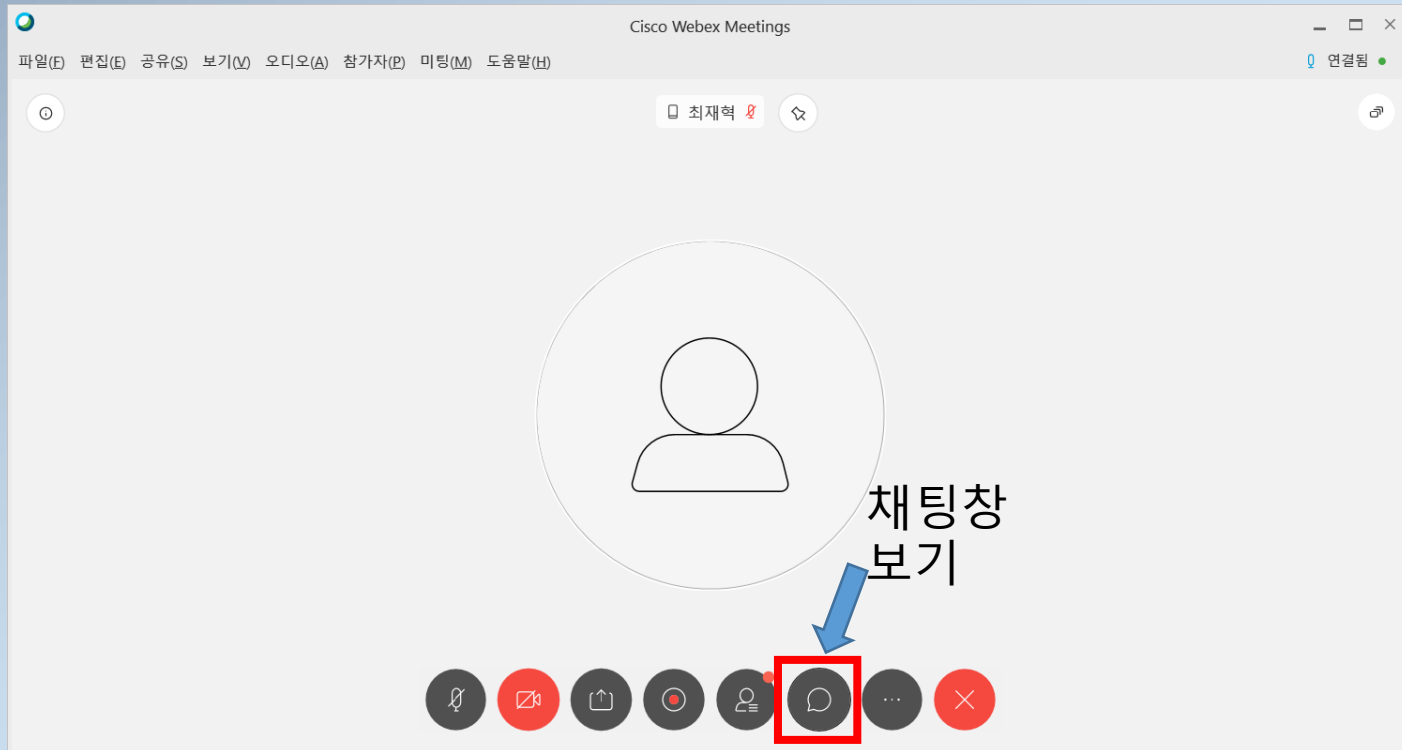
✓ 채팅

(SW학과) 최재혁 님이 모두에게:
202034567 홍길동

오후 6:04

- 출석 확인: 출석 메시지를 남긴 시간을 수업 종료 후 확인합니다.

- 모든 채팅 내용은 파일로 저장합니다.
출석, 수업 이외로는 채팅을 자제하길 바랍니다.



• 이론 / 실습
• Term Proj.

• 질문 / 문의사항
↳ TA, CC: 교수님.



• 과제 제출시,
제출시간 연장

~ 23:59

Mobile Programming

Android Programming

Syllabus

Prof. Younhyun Jung

Email) younhyun.jung@gachon.ac.kr

Goal of This Course



- Introduce you to mobile programming
Android
- Learn skills for creating and developing mobile applications (apps) for the Android platform
- Create an app that will be placed on Android App Store (i.e., Google Play)

세계 동
iOS 강
비문 ..?

General Information



- Instructor
 - Prof. Younhyun Jung (정윤현)
 - Contact :
 - Room #312 @ Woongji Hall(산학 협력관),
 - younhyun.jung at gachon.ac.kr
 - Office hours : by appointment
- TA (Teaching Assistant; 수업 조교)
 - **Main** : TBA
 - Quizzes, Discussions, Projects etc..

How to contact



- All contacts via E-mail **[MP]** header in mail title
 - Step 1 : 수업조교 (수업조교에게 송신)
 - 교수 확인이 필요한 사항으로 판단되면,
 - 수신자: TA, 참조 : 담당교수로하여 이메일 송부
 - Step 2 : 수업조교 문의 시 해결이 안되었을 경우 → 담당교수



Lecture Plan (1/2)

Week	Contents	Remark
1st week (3/01~3/07)	<ul style="list-style-type: none">- Class overview- Understanding android- Setting up development environment- Making your first app : “Hello World” application	Setup development environment
2 nd week (3/08~3/14)	<ul style="list-style-type: none">- Android user interfaces: views and layouts	Project Team Assignment
3 rd - 4 th week (3/15~3/28)	<ul style="list-style-type: none">- Application basics:<ul style="list-style-type: none">• Understanding layout inflation• Activity, intent & activity lifecycle• Service, broadcast	Project Idea Draft
	- Project Presentation	3/25(Thr.)
5 th - 6 th week (3/29~4/11)	<ul style="list-style-type: none">- Widgets & Event	
7 th week (4/12~4/18)	<ul style="list-style-type: none">- Graphics	

Lecture Plan (2/2)



Week	Contents	Remark
8 th week (4/19~4/25)	- <i>Mid-term Exam</i>	
9 th week (4/26~5/02)	- Thread - Animation	Mid Term Progress Presentation (if available)
10 th week (5/03~5/09)	- Networking - Database	
11 st week- 12 nd week (5/10~5/23)	- Multimedia - Location based Service	
13 rd week (5/24~5/30)	- NFC & Sensor	
14 th week (5/31~6/06)	- <u>Term Project Final Presentation (6/01)</u>	Final Report
15 th week (6/07~7/13)	- <i>Final exam</i> ⇒ 원만하려면 불 예정?	

Evaluation



평가요소	성적 평가방법	비율
출석		10
중간고사		20
기말고사		20
레포트		10
그룹 프로젝트		30
기타	Quiz	10
기타2		0
합 계		100

→ 해당 실습 결과 제출

Term Project (1/2)



- Goal
 - for each student team to create an app.
- Each team must be composed of 3-4 students, which will be assigned at the beginning of the semester. (by the end of 2nd week, 3/12)
- The app should be
 - useful or an entertaining app, which can be: game, utility, educational, etc.
- NOTE:
 - This major project will occupy a significant amount of your time in this semester.
 - Several project milestones (a series of progress steps) will be assigned throughout the semester: proposal, prototype, alpha-test, release (on the Android Market, if preferable).

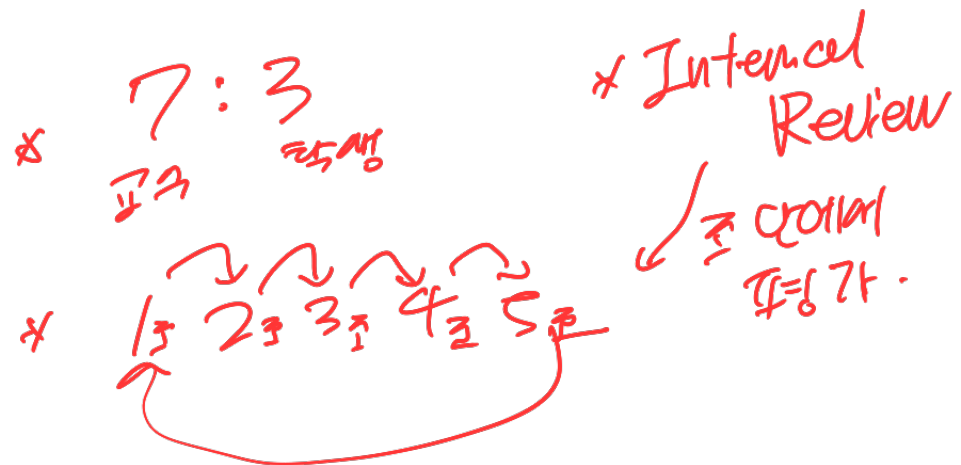
Term Project (2/2)



- Schedule (tentative)

Week	Contents
2 nd week	Team Composition (Forming a team) @ <u>3/12 (Fri.)</u> <i>장기 7명</i>
4 th week	Submit a Project App Proposal (prototype): around <u>10 min presentation</u> @ 3/25 (Thr.)
14 th week	Final Presentation @ 6/01 (Tue.) Term Project evaluation (by prof. & peer review)

10 min



Term Project Team Assignment



- ❖ Learning to work in groups is an important part of your education
- Project team organization Rules
 - ~~3~~~4^{~5} members per team
 - The final decision (permission) will be done by TA & prof. Jung
 - Make sure everyone has to contribute
 - e.g., design, coding, UI/graphic and so on
- Due date : ~ 3/12: cyber campus에 팀 구성원 게시
(팀을 찾지 못한 개인들은 임의로 팀 구성)
- Final decision: 3/14

Project App Proposal (Prototype)



- Suggest you to use a remote repository (e.g. GitHub) to manage your team source codes
- Your proposal must include
 - The title
 - Member information (+e-mail address)
 - Brief description
 - Target
 - Contents (in details)
 - Key features (advantages)
 - (continued to the next page)

20:00

Cont.



- Required technology for implementation
 - Roles of each member : which person in the team is going to assume primary responsibility for which parts of the project (including the proposal, final report, and presentation)
 - Your timeline !
-
- Also, prepare a PPT slide for presentation
(due: 3/25)

Late Policy



- **No late submission is allowed !!!!!**
 - Do NOT send me e-mails/notifications for any “late” submissions
 - Submission should be done no later than **11:59 PM (not 12:00)** of the due date.

Recommend



- Bring an Android phone/tablet for programming
 - Latest android version is recommended
 - Working on an emulator is also find but may be slow
- Having your own Android Book(s) may help you study this course
 - Korean book(s) are fine!

TODO



- Setup your development environment for this class
- <https://developer.android.com/studio>
 - 가상머신 에뮬레이터 기반 구동 or 스마트폰 기반 구동
(둘 중 하나의 방식으로 구동 확인 할 것)

androidstudio

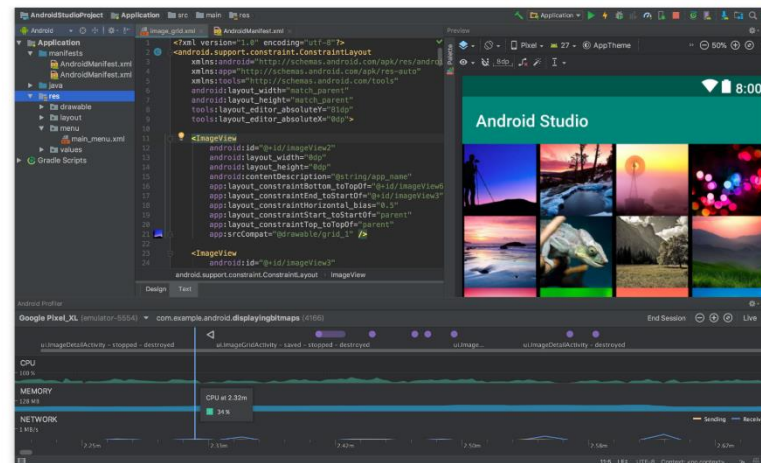
Android Studio provides the fastest tools for building apps on every type of Android device.

DOWNLOAD ANDROID STUDIO

3.3.1 for Windows 64 bit (947 MB)

DOWNLOAD OPTIONS

RELEASE NOTES



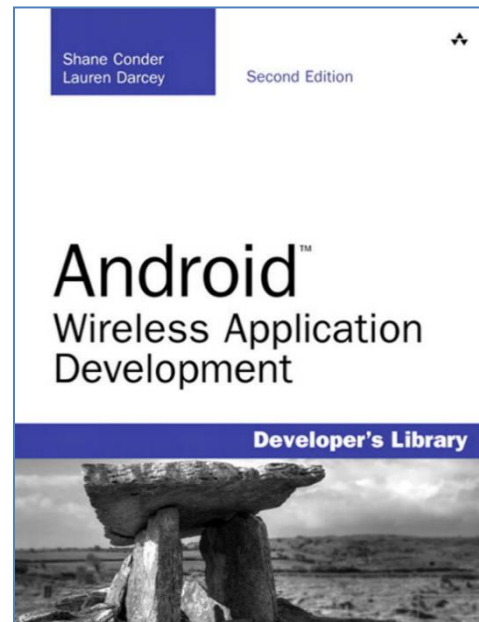
Reference Textbook(s)



- Neil Smyth , [Android Studio Development Essentials: Android 6 Edition](#), CreateSpace, July. 2016



ISBN: 1535425334





GitHub



- A web-based (remote) Git repository hosting service
 - **git** : distributed revision control and source code management system (c.f., subversion)
- Often used to host open-source software projects
- Provide “free” accounts
- Must Visit : <http://git-scm.com/>
 - <http://git-scm.com/book/ko/v2>
 - Study by yourself !!
 - <https://www.youtube.com/watch?v=73l5dRucCds>

Sign Up for a new GitHub account

- Create a new account on GitHub for your source code management
 - Refer: <https://www.youtube.com/watch?v=ezxRcdJ8gIM>
- The GitHub will be widely used also in many other classes including CapStone Design.