CC3002 Presentation

Profesor: Alexandre Bergel
Auxiliares: Tomas Vallejos Parada

31/08/2020

CC3002 Team

Professor

Alexandre Bergel: abergel@dcc.uchile.cl

Office 308 (DCC, 3rd floor, old building)

Monday 12:00 - 13:30

Wednesday 14:30 - 16:00

Auxiliares

Tomas Vallejos Parada

Friday 12:00 - 13:30

Ayudantes…

<mode>Online only</mode>

As in the previous semester, all the lectures and clases auxiliares:

 will be given with Zoom

 Will be recorded and the video will be made available

Evaluations will be done remotely, only

Objectives

Become comfortable with *object oriented programming*: Learn to *think with objects*

Learn the Java programming language: its syntax, idioms, patterns, and styles

Learn the *essentials of the Java class library*, and *learn how to learn* about other parts of the library when you need them

Objectives

Remember that this lecture is *not* a lecture on learning how to program and how to make software

It is an *introductory* course of programming methodology

Objectives

At the end of the semester, you will *not* be an experimented software engineer or even a good programmer

> Years of training and complementary lectures are necessary

… but at the end of the semester, you will probably be able to realize small (in times, effort, and resources) tasks… and you shouldn't be ashamed of the code you write

Encuesta from a previous semester

Un amigo que dio el ramo conmigo me dijo que Usted el profesor Alex le "subio su precio de mercado"

Comentario en u-cursos

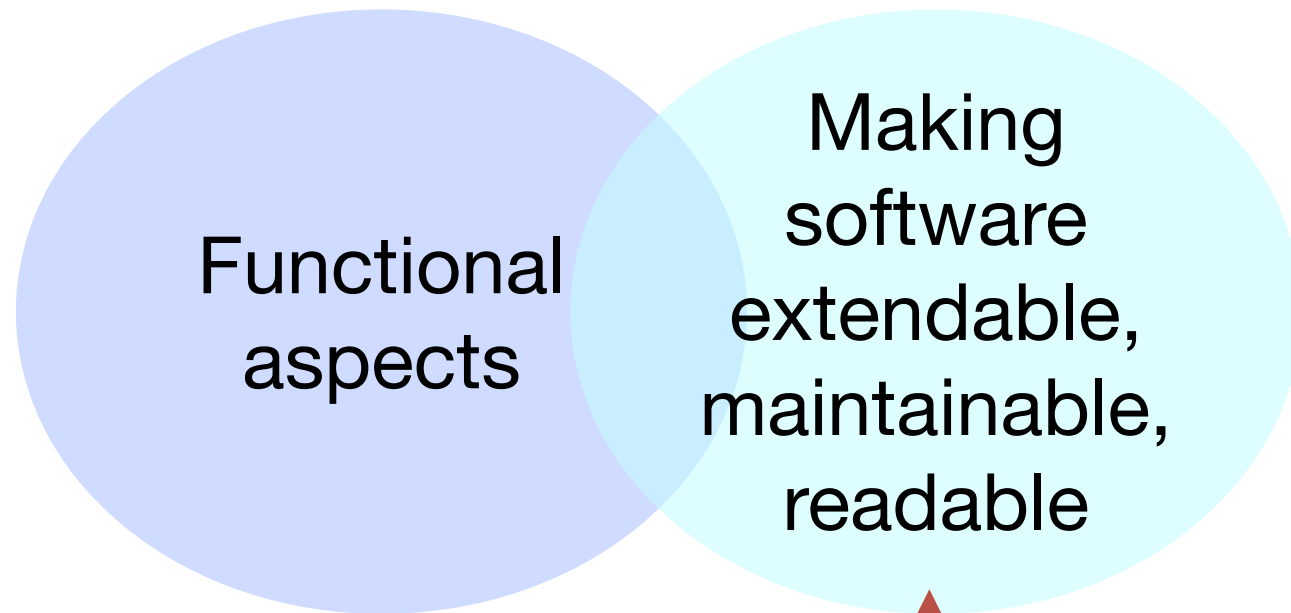Software Source code

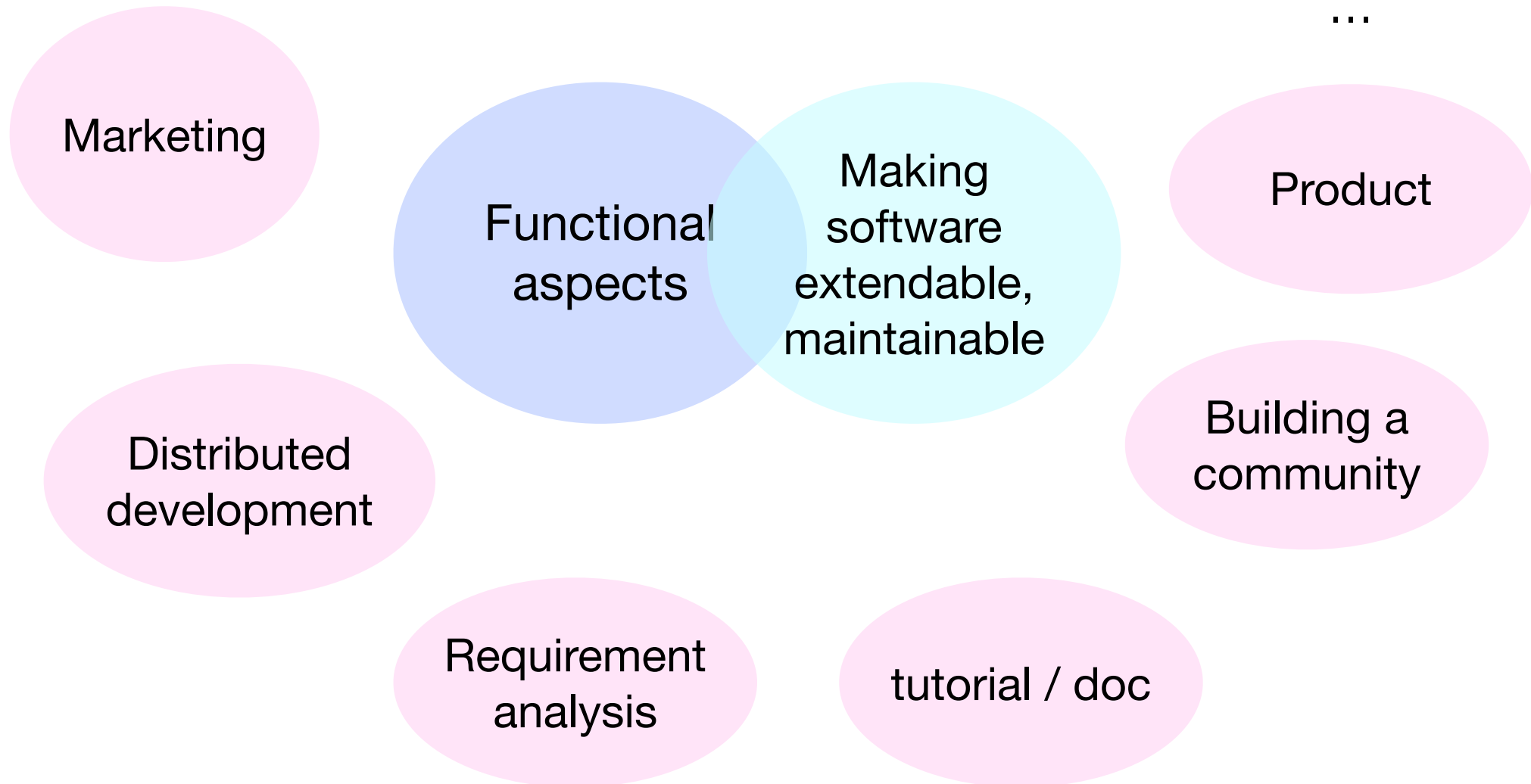Functional
aspects

Software Source code

Functional
aspects

What you have learnt so far
(*e.g.,* writing functions, algorithms,
structure ideas)

Software Source code

Functional aspects

Making software extendable, maintainable, readable

What this *ramo CC3002* is all about
(*e.g.,* writing well engineered code, unit testing, methodology, design pattern)

What a software product involve

Marketing

Distributed development

Functional aspects

Making software extendable, maintainable

Requirement analysis

tutorial / doc

...

Product

Building a community

Important point to keep in mind

It is not enough just to write code that works.

It is as important -- perhaps more important -- *to read code and write code well*; not merely code that works, but code that is legible, maintainable, reusable, fast, and efficient

Practice is key

Just reading the slides and books is not enough.

It is like trying to learn French by reading a book

Formalities

Régimen de clases

2-3 horas de cátedra

1-1.5 horas de docencia auxiliar

5.5 horas de trabajo personal

Evaluación

3 Tareas

3 Mini-Tareas

Requisitos de Aprobación

La Nota Final se calculara de la forma siguiente:

NF = NT * 0.7 + NMT * 0.3

NT = promedio de las 3 tareas

NMT = promedio de las 3 mini-tareas

NT tiene que ser >= 4.0.

El promedio de las tareas es reprobatoria.

Si NF esta entre 3.7 y 3.9, tiene derecho a un ejercicio recuperativo

Atraso en la tarea

Each of you will have *a budget of 10 days* = 240 hours for the semester

You can use your budget *for any tarea*

Whole hour is counted

Time limit will usually be 23:59

If you submit your tarea 1 at 00:00am then your budget is 71 hours

No need to send us an email. We will do the accounting for you

Tareas

It is *essential* that you discuss with the auxiliar about your tareas

We have seen many students who lost points because they did not talk about their tareas

Espacio de diálogo

Foro on u-cursos

All questions related to the *lecture contents*, *topics related to programming / software engineering*, *tareas* are welcome

Think twice when posting about something else

Post on foro can be easily misinterpreted

Misinterpreted posts can be devastating

Yes, inappropriate post can harm people!

Do not post on the foro:

Before lunch time

After working hard and for a long time on a task

A few minutes before the tarea deadline

If you have little time to do the tarea

In the middle of a fierce battle with Git

Espacio de diálogo

Auxiliares are very helpful and willing to help

You can always come to my office

Sending an email before is sign of being polite :-)

This "Espacio de diálogo" is very important because

CC3002 = Students + ayudantes + auxiliares + profe

All together, we are a team with a common goal

Agenda

1. Objetos, clases, tipos y polimorfismos

2. Testeo y desarrollo iterativo de una aplicación simple

3. Metodologías y patrones de diseño de software

4. Ética en el desarrollo de software

5. Tópicos avanzados de Java de programación

A few words about ethics

ethics: *moral principles* that govern a person's or group's behavior

Things you should *not* do:

    ask for extra days for a tarea or a control. You can actually, but only for a good reason (e.g., attending a conference, international project)

    complain that you did not understand a lecture without asking for explanation (in my office or via email / foro)

    say you authored a piece of work if this is not the case

    do the work at the last minute

    ...

A few words about ethics

Things you are welcome to do

look on internet for inspiration

do your tareas early enough

come to my office to ask for help

ask for help to the auxiliar

attend catedras and auxiliar

use u-cursos to interact with other students

send email in advance when you will be late, need to leave earlier

...

StackOverflow

"A language-independent collaboratively edited question and answer site for programmers."

You can ask questions and look for answers

Retro-alimentation

Retro-alimentation is an important pedagogical tool

It contributes to the "logro de aprendizajes"

Exercises will always be accompanied by a clear solution

Will be after each control. Hopefully the very next class following the control

Your tarea results will be accompanied with feedback

Material

All the software and libraries we will use during the semester will be open-source

> You do not need to pay for it

However, there is no *free* book that completely covers the lecture content

Pomodoro technique

Great methodology!

Help estimating effort, reduce procrastination, be objective-driven

Help to divide large tasks

Reduce amount of bad code

Pomodoro technique

1 - Choose a task you would like to get done

2 - Set the pomodoro for 25 minutes

3 - Work on the task until the pomodoro rings

4 - When the pomodoro rings, put a tick on a paper

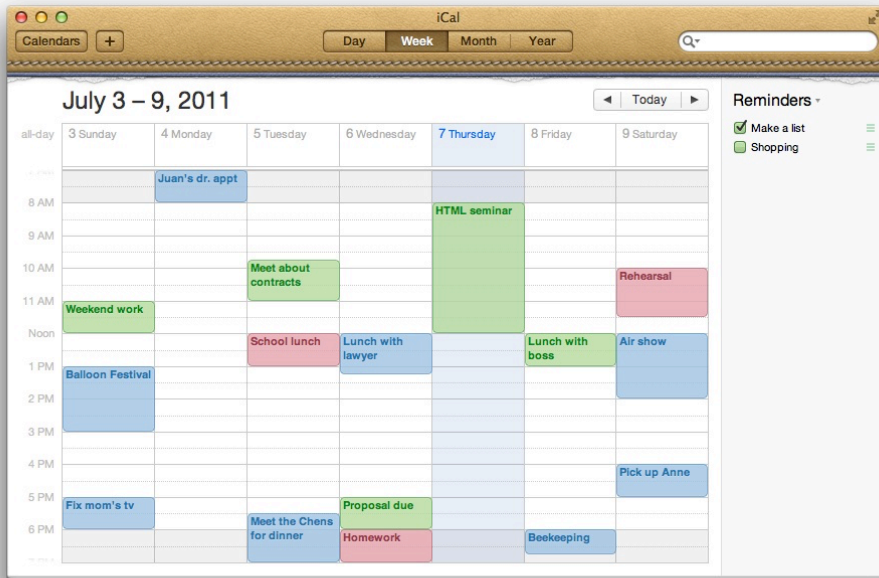5 - Take a short break

6 - Every 4 pomodoros, take a longer break

http://pomodorotechnique.com

http://PomoDoneApp.com

trello.com your dashboard
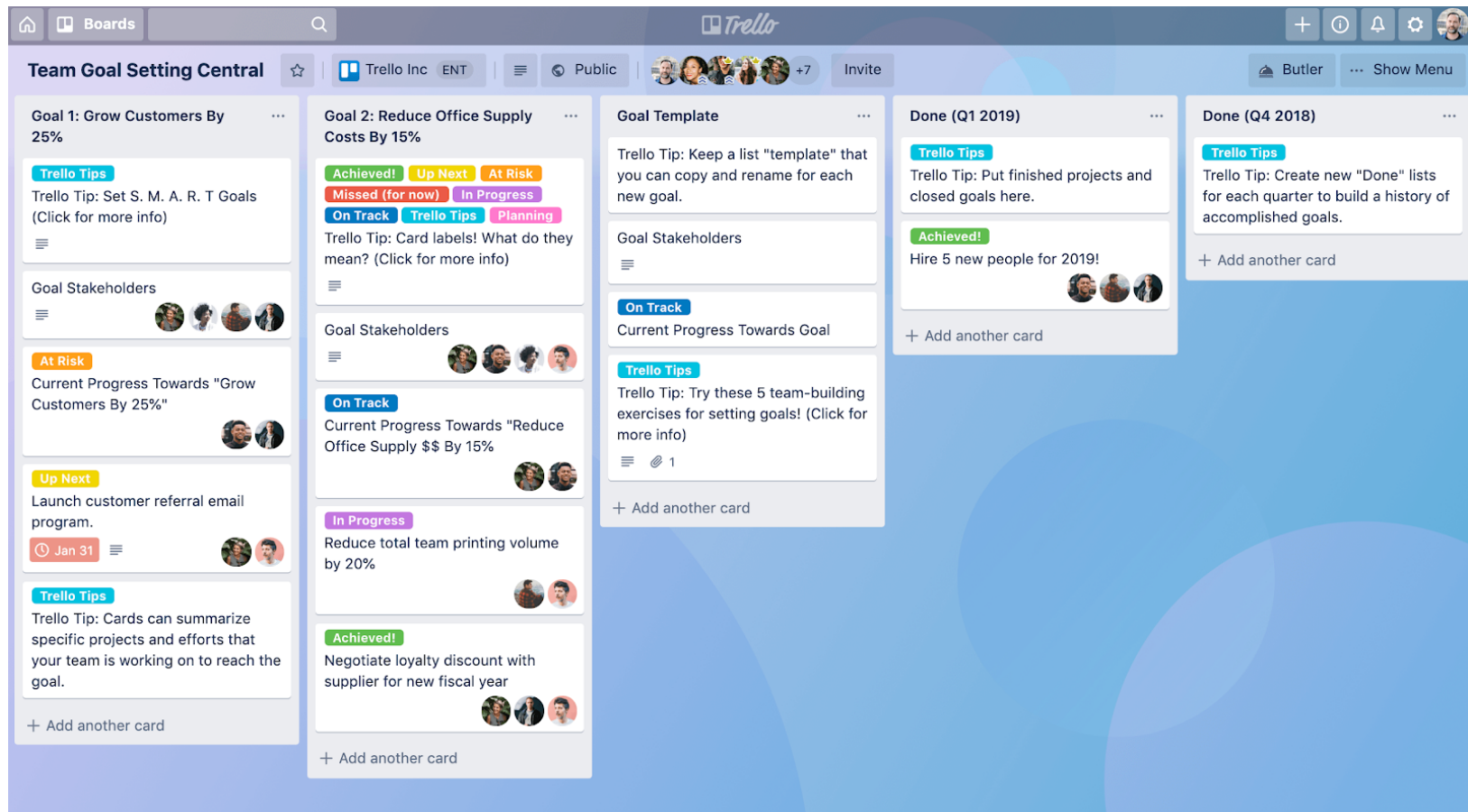
It is central to the way I organize my work

Use a calendar!
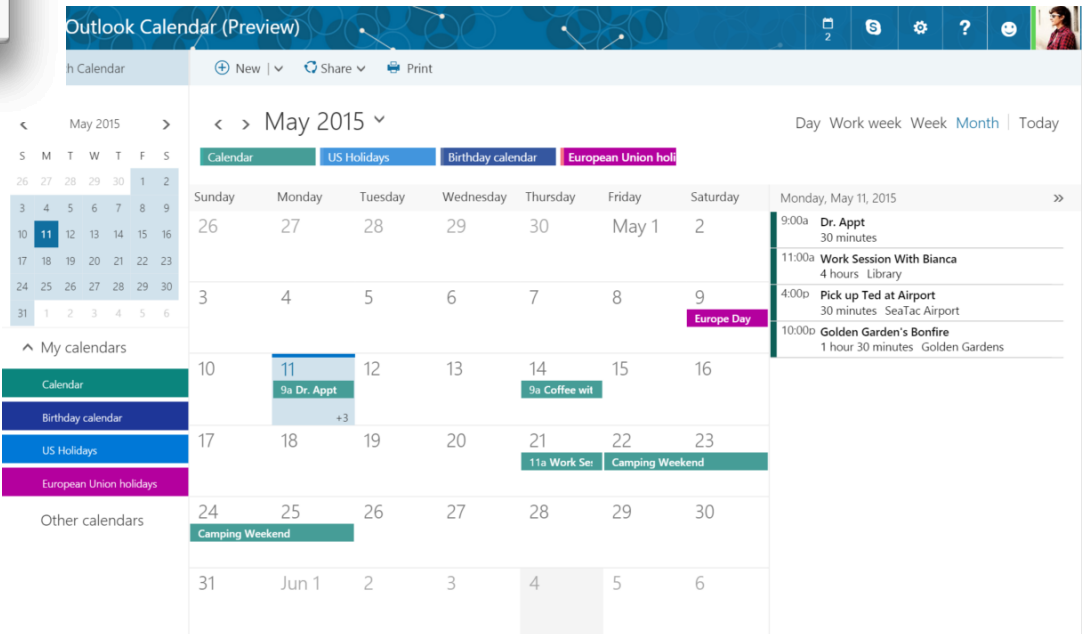
Productivity

It is essential that you carefully think on your productivity

You need to have an agenda with the important deadlines (tareas, controles, examen)

Seeing this agenda will have a positive impact

Print your agenda and stick it on your fridge

Isn't that weird?

Alto rendimiento in sport, trainer and coach will say:

Sleeping well is essential

You get energy from eating well, balanced food

Having a clear work plan is essential (short, medium, and long term)

Having well defined training sessions are key to success

The University curricula

is essentially centered on lectures and the performance of students

Does not say much about how to manage time

Knowing how to manage time and effort is essential

Área de Calidad de Vida Estudiantil

Professor (I and other) are able to listen at student concerns

We can always discuss or visit the Area de Calidad de vida

http://escuela.ingenieria.uchile.cl/vida-estudiantil/calidad-de-vida/presentacion

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