



# CODE CHALLENGE



# COURSE DESCRIPTION

<b>Course name:</b>	Basecamp 2, Challenge 2
<b>Course code:</b>	INFBCC0122
<b>ECTS:</b>	1 ECTS
<b>Study points and workload:</b>	This elective provides you with 1 study point (EC). The study workload is at least 28 hours during Challenge Week.
<b>Prior knowledge:</b>	The challenge is a logical continuation of the program in Basecamp. The level of the challenge is aligned to Basecamp's program of Arch 2.
<b>Working method:</b>	Students work during Challenge Week in a team of 3 students. Students work independently on location and online. Teachers and peer coaches will be available for support but they don't provide solutions.
<b>Testing:</b>	A solution to 70% of the puzzles, submitted on Codegrade and presented in class. A minimum effort of 28 hours per person is expected. Students keep a logbook for this purpose.
<b>Learning materials:</b>	All Basecamp material, online content.
<b>Content:</b>	Students will do a Code Challenge (programmeerwedstrijd) covering programming concepts from Arch 1 and Arch 2.
<b>Notes:</b>	Testing is important.
<b>Course coordinator:</b>	Xenia Hasker, John Grobben
<b>Date:</b>	1 April 2024

## 1. Introduction

Week 8 is designed as a flexible week. If everything is going well, you will do this challenge assignment. If you experience difficulties, you can use this week to get back on track. 'Back on track' is described in another document.

## 2. The challenge

### *Win the code challenge!!!*

#### Goal

The goal of the challenge is to win a code competition (Top 5 is also very good!).

#### General description

We will provide you an URL of a website with puzzles. By solving these you can earn points. There is a website where you can enter answers. If your first try is correct, you earn 10 points. If you need 2 tries, you earn 7 points. 3 tries: 4 points and 4 tries 1 point. So you have 4 tries max.

You work in teams of 3 so good team work is also necessary. *The best team will win a prize!*

#### Techniques

- Write decoding/encoding programs
- Numerical programs
- Two dimensional arrays
- Text analysis
- Problem solving in general
- Brainstorming
- Information gathering
- TESTING

## 3. TIPS:

1. Start with problems that look easy.
2. Google can be your friend, but not your only friend.
3. Teamwork: think aloud to trigger ideas for your team mates.
4. Help each other.
5. Test your program before submitting the answer!!!
6. Test with extra print-statements
7. Test with smaller examples

#### 4. Minimal requirements:

- 70% of the puzzles solved (17 of 24).
- Log (logboek) with your activities of week 8 (tell about meetings, research, brainstorming, programming, TESTING). **Use this format:** Logbook-format.xlsx.
- Submit a **ZIP-file in Codegrade** like this:

```
<groep X - klas Y - challenge 2.zip>

<logboek/>

<logboek - studentnaam - studentnummer.xlsx>

<...>

<puzzel-1.py> # only for puzzles solved by programming

<puzzel-2.py>

<puzzel-3.pdf>

<...>

<antwoorden.txt>
```

#### 5. Planning

- Week 7 decision challenge or back to track, make plan for “back on track” or read this challenge document.
- Week 8: working on challenge or back on track, handing in log and finished programs.
- Week 9: showing products to teachers (and other students)

#### 6. Deliverables

- Solutions of at least 70% of the puzzles (.py for puzzles with code or pdf-file)
- Hour registration - logboek (for each member of the team - we expect you to work at least 28 hours on your back on track challenge. **Use this format:** Logbook-format.xlsx.
- Demonstration of some (elegant) solutions (week 9, in class)
- Hand in in Codegrade: A2W8C1 - Challenge week 2 (**as a zip-file**)

#### 7. Deadline

**The challenge will be held from Tuesday (2/4) 10.00 AM till Sunday (7/4) 11.00 PM**

## 8. Grading

The challenge is a team effort, to which the students contribute individually. The grade is on an individual base. To qualify for a passing grade for this challenge, you must meet the following prerequisites and requirements:

Prerequisites	Fulfilled	Not fulfilled
Delivery before deadline		
Proof minimum investment of 28 hours (by logbook)		
Learning goal	Weight factor	Taxonomy (Miller)
You meet the minimum requirements as described in this document (see point 4).	100%	Knows how/Shows how
<i>Pass mark (cesuur): the prerequisites must be fulfilled, the game must meet the minimum requirements in order to receive a 'VLD' (voldaan).</i>		

All students who subscribed to this challenge, will be graded with a 'VLD' (voldaan/fulfilled) or 'NVL' (niet voldaan/not fulfilled).

## 9. Retake

In case of a 'NVL' or if you do not meet the prerequisites, you have to take part in the resit. The assignment for the resit is decided and communicated by the Basecamp teachers. The teachers clearly indicate which parts of challenge 2.2 still need to be modified to meet the requirements and indicate the new deadline for the retake of challenge 2.2. The challenge has to be finalised within the Basecamp period.

**We hope you will enjoy the match !!!!!**

## ASSESSMENT FORM

Student name		
Student number & Class		BC21
Teacher name(s)		
Prerequisites	Fulfilled	Not fulfilled
Delivery before deadline		
Proof minimum investment of 28 hours (by logbook)		
Learning goal	Weight factor	Taxonomy (Miller)
You meet the minimum requirements as described in this document (see point 4).	100%	Knows how/Shows how
<i>Pass mark (cesuur): the prerequisites must be fulfilled, the game must meet the minimum requirements in order to receive a 'VLD' (voldaan).</i>		
<b>Explanation</b>		<b>Grading</b>
		VLD / NVL