

Problem: How can the university encourage the students to use the stairs instead of using the elevator?

Solution: Using Gamification!

On the basis of gamification we can change something, that is serious/boring, into something funnier/more motivating/more efficient

Gamification: Characteristics

- ✘ Collecting Points
- ✘ Rewards and Honouring
- ✘ Social Interaction
- ✘ Competition
- ✘ Rankings
- ✘ Items
- ✘ Time Pressure
- ✘ Evaluation among Players
- ✘ Challenges (e.g. quizzes, puzzles)

Observations: Behaviour

- ✘ People use the elevator although they just want to get over one floor
- ✘ People don't use the opportunity for easy physical exercise
- ✘ People think, they can save time, but using the elevator isn't always the quickest way
- ✘ People forget, they use up electric potential energy with using the elevator

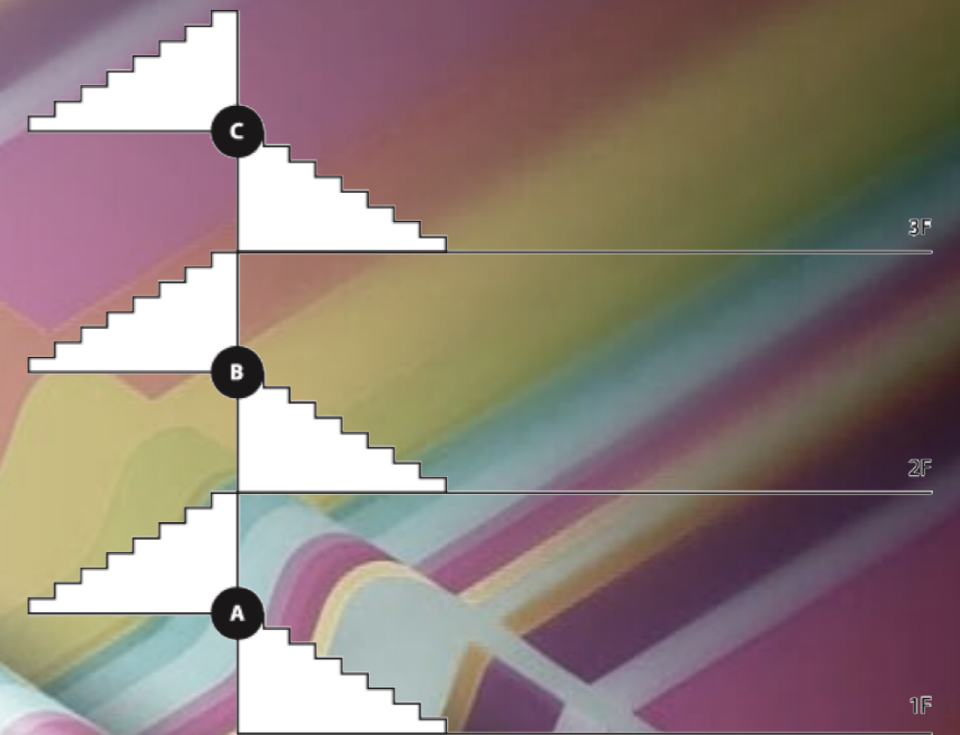
Idea: Taking the stairs as an adventure

- ✘ NFC-Chip in the middle of every stair
- ✘ People passing by: Scanning the chip with their smartphones



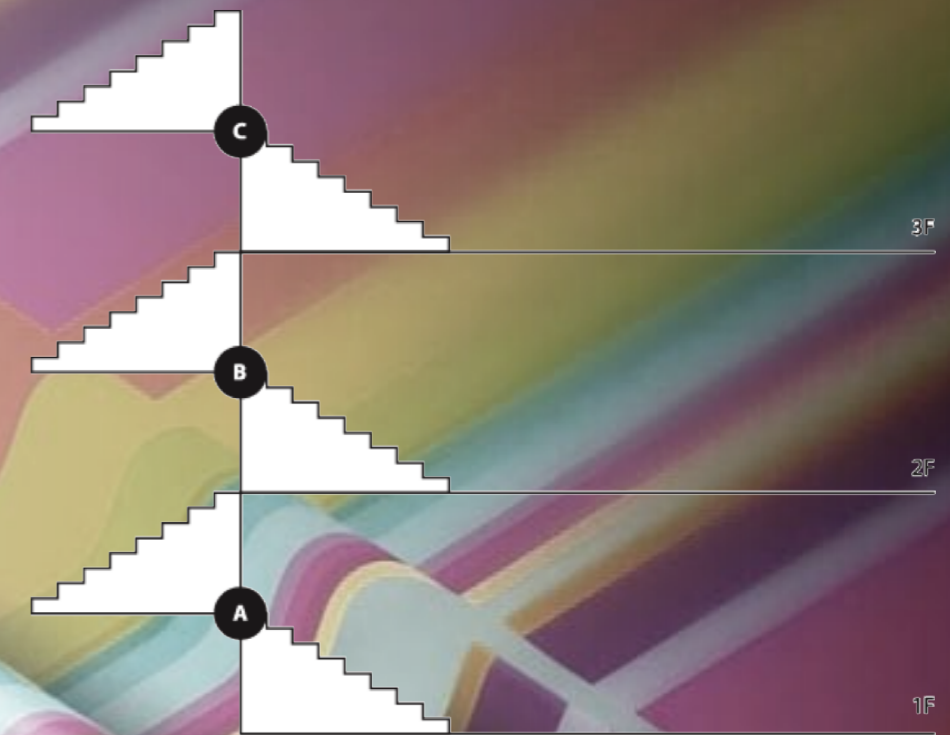
Idea: Taking the stairs as an adventure

Scanning the NFC-Chip means: Player took the stairs → Player gets points as a reward



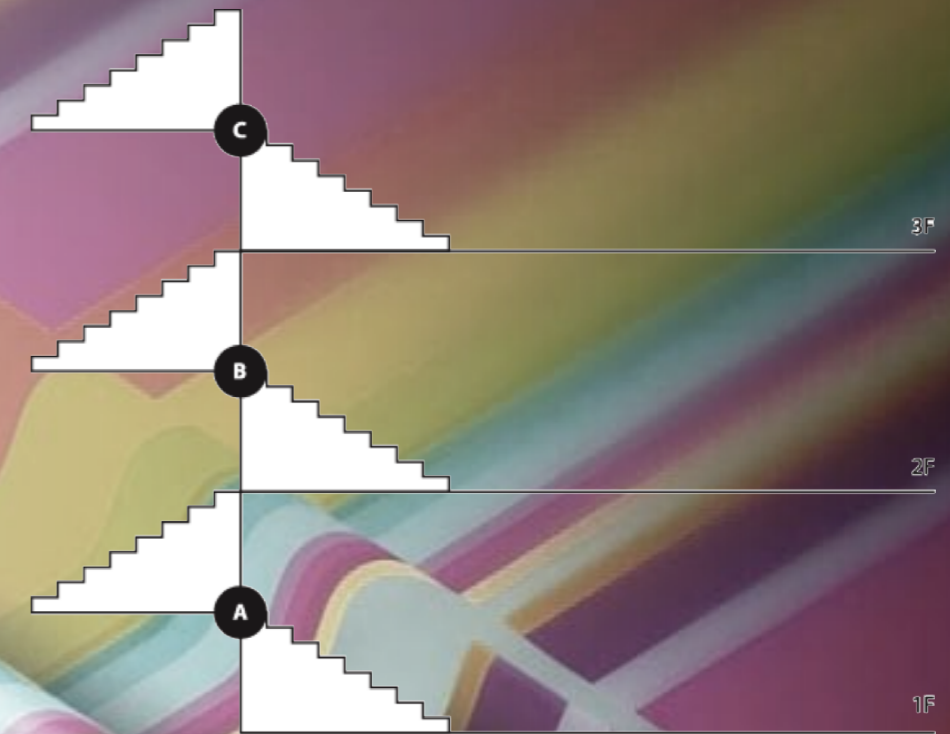
The Logic of the Application: Rules of determining personal movement

- ✘ Once a NFC-Chip is touched by a smartphone, it's blocked for it for some time (to avoid multiple scanning)
- ✘ Tagging Chip A and B sequentially → additional points for taking the longer way
- ✘ For the same reason tagging A, B and C → sequentially more additional points than above
- ✘ Extra rules can be applied



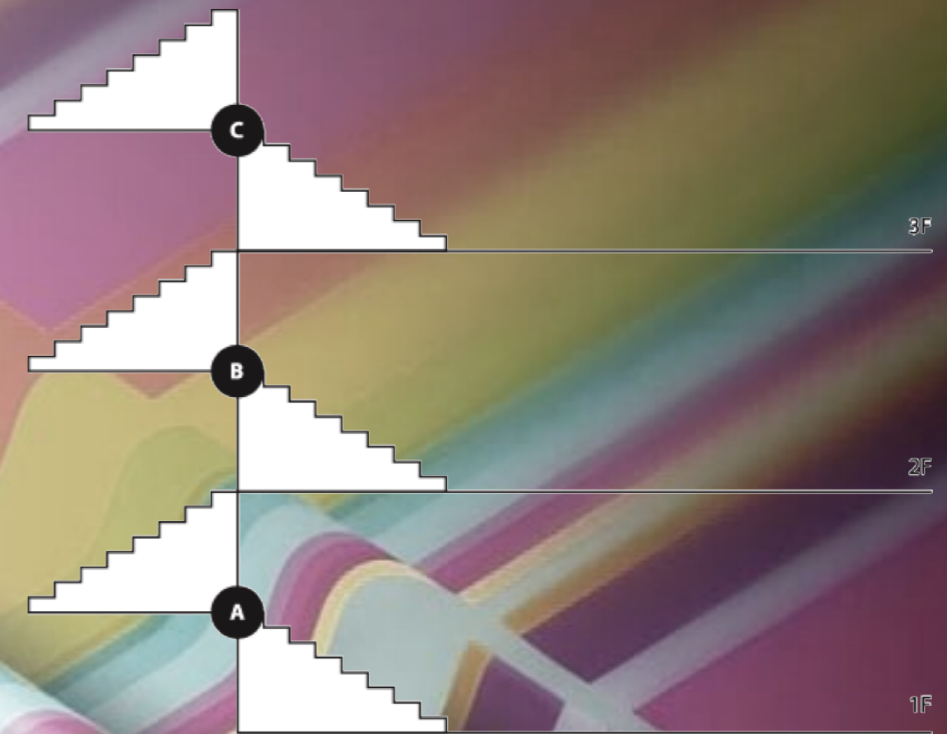
The Logic of the Application: Rules of determining personal movement

- ✘ The application recognizes your current location. For example, if your current position is 2F, you can reach the chips 'A' and 'B'. Suppose you tag on 'B', then you are on 3F. Additionally, if you tag 'B' and 'C' sequentially, your position will be 3F when your current position is 1F.
- ✘ The application determines your direction by the same token above.



The Logic of the Application: Rules of determining personal movement

- ✘ Using the elevator anyway, the player should use the chip located next to the elevator to write down the floor he goes to into a PopUp-Notification



Motivation: Helping the team

- ✘ The student is a part of his college, e.g. Kyung-Bo and Sunyoung are students of the college *Human ecology*. Further colleges are *Liberal Arts, Business* etc.
- ✘ The points of the students of one college will be summed up (the points may be averaged as a further challenge and to balance the fairness for smaller colleges)
- ✘ The ranking of the colleges will be displayed on the screens in the lobbies of the buildings

Application: First basic draft



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[...]

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Outlook: If the app succeeds...

- ✘ Other institutions could adapt it, people could scan everywhere and belong to different teams
- ✘ Awareness for health and nature may rise
- ✘ Even if there are no chips in other buildings, people could get used to climbing the stairs