*UNFAIL – A guide to transform failure into knowledge*

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All parts of this project assignment are uploaded and made public at:

<https://github.com/Tirgit/unfail>

**Background**

For most academics, work life is paved with painful mistakes and failures. Failures come in many shapes and sizes – missing an important deadline, giving a bad presentation, embarrassing yourself or others in public, failing to understand key concepts, being rejected or just being late from a meeting can inflict negative emotions that can be harboured for a long time to come. Failures are painful for two major reasons; First, simply, they feel bad. Experiencing failure often also means missing out on the feeling of success and self-appreciation. Second, failure often correlates with a sense of fault and carries with a presumption that one has done something wrong [1]. On the other hand, facing failures and learning from them is considered an important path towards learning. This is underscored by the inspirational quote from the world-famous basketball player, Michael Jordan: “*I've missed more than 9000 shots in my career. I've lost almost 300 games. 26 times, I've been trusted to take the game winning shot and missed. I've failed over and over and over again in my life. And that is why I succeed.*” – in fact, the authors of the book *10 Mindframes for Visible Teaching – Teaching for Success* used this very quote as their main conclusion for their overall work, which represents the vital importance of failures in education [2]. While it is not immediately clear whether the emphasis in this quote is on perseverance/grit [3] or an active learning from failures (moving on *despite* the failure vs. moving on *by processing* the failure), the authors encourage educators to make the classroom a safe place to make mistakes where “*errors are opportunities for learning*” [2]. According to the authors, the means of reaching this state is to create an atmosphere of confidence and trust where mistakes are not frowned upon but rather considered as learning opportunities. As the level of anxiety is positively correlated with the learning process, general strategies to reduce anxiety and transform failures into learning are warranted [2]. As an interesting side-note, in 2018 Google has made public its internal process of documenting and learning from failures (called “postmortems”) in the company [4]. While such frameworks are implemented at Google and elsewhere in large companies [5], no such system exists at Lund University for students.

The overall goal of this project work is to develop an education framework that has a potential to help individuals processing failure by describing, logging and categorizing them. My hypothesis is that failures can be extremely useful in driving learning if they are properly analysed, processed, understood and remembered.

I termed to project “UNFAIL” – first, the word could be interpreted as an acronym of UNderstanding FAILure; second, the immediate notion the word gives is the feeling of recovering or coming back from failure, which the results of this project is indeed ought to help with.

**Methodology**

The planned outcome of this inquiry, UNFAIL, is an educational framework that will help students process, remember, understand and overcome failure in an effective and productive manner. I chose an **app wireframe** as the output medium of this assignment. A wireframe is basically a draft that is used to demonstrate the main functionalities of an app or software. The focus here is on functionality and not aesthetics, although I aimed to put together a visually appealing draft.

The planned app will offer a short “ritual” that students will be able to use on their own, after experiencing failure. The “ritual” is comprised of logging failures and mistakes with i) Title, ii) Description and iii) Learning Points and subsequently tagging them with feelings, emotions or other terms. The app would create a memory symbolized as a coloured gem and would assemble a timeline or collection of gems which are always there to browse and look back on. In addition, it would be possible for users to optionally publish their stories, strictly anonymously, to the cloud, where it would be browsable by all users, by selecting tag categories. I selected a gem as the symbol for the app, as these stories should represent something worthy and something you should hold dear – by browsing your collection of gems you can revisit your past failures and remind yourself of the associated learning points.

The tool is inspired by and constructed based on three major resources:

1. Analysis of responses to a short questionnaire I put together about prior experiences on failure (filled in by 5 PhD students) (see *Appendix 1 - Questionnaire* for the questions and *Appendix 2 – Key concepts* for the analysis of the responses)
2. Google’s internal failure management system [4]
3. Amy Edmondson’s published article in the Harvard Business Review [1]

**Results & Wireframe**

Five PhD students filled in the circulated questionnaire.

**Potential future steps**

More thorough research?

Questionnaire further developed and sent to students and other employees?

Could this be actually useful for LU?

Prototype app?

**References**

1. Edmondson, A.C., *Strategies of learning from failure.* Harv Bus Rev, 2011. **89**(4): p. 48-55, 137.

2. Hattie, J. and K. Zierer, *10 mindframes for visible learning : teaching for success*. 2018, London ; New York, NY: Routledge. xxv, 180 pages.

3. Education, T.T. *Angela Lee Duckworth - Grit: The Power of Passion and Perseverance.* [*http://t.ted.com/f5s2aeV*](http://t.ted.com/f5s2aeV) *(Accessed: 22 March 2019)*. 2013.

4. Lunney, O., et al. *re:Work - Postmortem culture: how you can learn from failure.* [*https://rework.withgoogle.com/blog/postmortem-culture-how-you-can-learn-from-failure/*](https://rework.withgoogle.com/blog/postmortem-culture-how-you-can-learn-from-failure/) *(Accessed: 22 March 2019)*. 2018.

5. Toyota. *Toyota Production System.* [*https://www.toyota-global.com/company/vision\_philosophy/toyota\_production\_system/*](https://www.toyota-global.com/company/vision_philosophy/toyota_production_system/) *(Accessed: 22 March 2019)*.

10 mindframes – I read three chapters that seemed to be relevant to mistakes, failures and anxiety in general: Chapter 6 (cultivation of culture of making mistakes), Chapter 9 (building trust, anxiety, safe place to make mistakes), Chapter 11 (Michael Jordan, overall conclusion)

Ted Talk – In this TED Talk, the lecturer talk about her experience in teaching and how the strongest predictor of success and positive learning outcomes is perseverance

Lunney – Internal failure management of Google. Very interesting to see how big companies have procedures to do this!

Edmondson – amazing paper that redefines failure and its relationship with blame and fault

Toyota – website describing the mistake management of the assembly line at Toyota