Bogaziçi University, Computer Engineering Department ENG 493 Launching A Startup

Instructor: Emrah Yalaz <u>Linkedin</u>

Description

ENG493 covers the conception, launch, funding and growth of a technology startup with special emphasis on software products. Assignments are designed to practically apply other-than-coding skills like marketing and design thinking. Case studies are based on real-world, early-stage software startups from the USA and Turkey.

ENG 493 is a team-based, practical class where students experience startup constraints: result-driven environment, limited time and resources, rapid iteration and feedback.

Students work in teams to build a MVP/prototype/demo and prepare an investor pitch. Group projects are treated as real ventures. Past students went on to launch profitable businesses and founded/joined other startups. Past projects have been mostly software with few hardware products. Turkish founders/angels/VCs join as speakers. The instructor created the methods marked with © and designed this class.

Textbooks and Material

- Hackers and Painters by Paul Graham
- Zero to One by Peter Thiel
- Makebook.io (use YALAZ2021 code for \$10, first 40 students)
- Selected Essays Paul Graham, Joel Spolsky, Keith Rabois and others

Grading

Attendance 30%
Assignments 30%
Final Pitch/Demo 40%

Course Outline

Intro Fundamental parts, mechanics and constraints of a tech startup

How to get startup ideas

Introducing FUCHS method©

The path from an idea to launch

How to avoid most common startup killers

Introducing Triangulation Method©

Story-Team Introducing Narrative Method©

Product-market-team fit How to attract co-founders

How to interview engineering and product team members

Startup team composition and team jelling

UVP What to launch

Introducing Product Board©

Forming the Unique Value Proposition (UVP)

Building the Sunny Day Flow©

Mapping substitute/complementary products

Sizing the market opportunity: TAM/SAM/SOM analysis

Interviews How to collect and iterate based on user feedback

Building user profiles, aka Personas Preparing for user-centric interviews

Introducing Topic Mapping

Interview rehearsal

Launch Extracting, mapping user interview insights on Product Board

Generating Minimum Viable Product (MVP) options

Introducing Six-Pack Method©

Launching the first version

HRBs Understanding hyper-responsive buyer (HRB)

Segmenting and bundling point of difference (PoD) features

Conducting HRB-centric interviews

MVP iterations based on HRB-feedback

Distribution Guerilla marketing: getting traffic with no or very little resources

Understanding growth levers
Building PoD marketing copy

Generating unique selling bundles

Pricing Saas bundles

Iteration Applying Agile principles

Techniques for faster feedback loops

Team iteration using lean methods (kanban board, Scrum)

Lean on a budget: using free/inexpensive tools to manage sprints

Metrics Understand the economics of customer lifecycle value

Understanding revenue models
Calculating LTV and CAC
Designing and debugging the acquisition funnel
Understanding cohort mechanics, managing pipelines
Funnel metrics from awareness to referral to churn
Setting KPI baselines and goals

Pitch Mechanics of pitching and fundraising

Principles of giving effective product demos

Understanding data visualization

Creating investor decks, data rooms

How to present to investors

Pitch rehearsal and feedback

Closing