

CAPSTONE PROJECT



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the high point : crowning achievement



CAPSTONE PROJECT

CORE SUMMER COURSE



The CAPSTONE TEAM

THE CITY IN NEED OF STARTUPS



**~ 100 STARTUPS ARE
EXPECTED TO FILL
NEW INDUSTRIAL
PARK SPACES**

EMERGING TECH SCENE

STARTUP AS A THESIS – 4TH YEAR IN YOUR OWN COMPANY



**MORE ABOUT
THIS IN THE
SECOND LECTURE**

 **EMERGING TECH SCENE**

7 WEEKS

1 – PROJECT / 05.06 – 27.07



DURATION

AI – OPEN SOURCE – EXPERTS


LEVERAGE IT ALL TO BUILD YOUR PROJECT



SCOPE and PROJECT SCALE

AI and OPEN SOURCE



Sam Altman 
@sama

...

heard something like this 3 times this week:

"our recent grads are now much more productive than people who have worked here for years because they've really learned how to use ChatGPT".

[Перевести твит](#)

1:11 AM · 21 апр. 2023 г. · **1,7 млн** просмотров

960 ретвитов **214** цитат **10,1 тыс.** отметок «Нравится» **802** закладки



 **UNIQUE OPPORTUNITIES**

PICK ONE OF
THE TIERS FOR
YOUR PROJECT

WEB, MOBILE, ML or a PERSONAL track

YOUR PROJECT SHOULD BELONG TO THIS TIERS

- **1 PROJECT PER TEAM (5 to 7 PEOPLE)**
- **DIFFERENT TEAMS CAN WORK ON SAME PROBLEMS**
- **DIFFERENT ASPECTS OF ONE PROJECT CAN BE BUILT BY DIFFERENT TEAMS**
- **YOUR PROJECT SHOULD BE PUBLIC, NO NDA, CLEAR PERSONAL CONTRIBUTION, REPORTING**



TIERS

MVP or a PROTOTYPE by week 3

Product or a service by week 7



GOAL

Project **EXAMPLES:**

- 1: Dog walking app for Innopolis**
- 2: Local co-driving Telegram webapp**
- 3: Calorie counting app with VIM's**
- 4: ...**

... you name it!



GOAL

PRODUCT, SERVICE or a PROBLEM –

YOUR PROJECT SHOULD AIM AND CONSIDER:

SCIENTIFIC
BUSINESS
HUMANITARIAN

- **HIGH SOCIAL UTILITY**
- **DEFINED CUSTOMER DOMAIN**
- **TIME, RESOURCE AND SCOPE CONSTRAINTS**



GUIDELINES

YOU CAN USE GENERATIVE AI

SO, THE BAR IS HIGHER



NOTE

CHARITY – BUILD SOMETHING FOR LOCAL MUSEUMS, NON- COMMERCIAL ORG'S, ETC

HUMANITARIAN

- **BUILD YOUR **PORTFOLIO** / SHOW YOUR SKILLS**



CHARITY

F

WHILE BUILDING YOUR TEAM

THINGS YOU MIGHT THINK IN PRIOR

- **MAKE A TEAM WITH DIVERSE SKILLS**
- **DIVISION OF LABOR**
- **SET THE RULES OF INTERACTION – MAJORITY VOTE/LEAD DECISION / FREERIDE HANDLING**



TEAM BUILDING

TO TRY AND FAIL IS OK!

THINGS TO CONSIDER

TO IMMITATE WORK IS NOT!

THINGS NOT TO CONSIDER



NOTE



PROJECT **TIMELINE:** WEEKLY DELIVERABLES

- **WEEK ONE** - *Form a team, define a clear project vision, and set up the basic infrastructure.*
- **WEEK TWO** - *Translate requirements into initial designs and backend structures*
- **WEEK THREE** - *Implement the core functionality of your Minimum Viable Product (MVP)*
- **WEEK FOUR** - *Ensure quality through testing, automate processes, and prepare for deployment*
- **WEEK FIVE** - *Gather user feedback, iterate on the MVP, and improve overall project quality*
- **WEEK SIX** - *Finalize the project, prepare all deliverables, and craft a compelling presentation*
- **WEEK SEVEN** - *Successfully present your project to TAs and peers.*



ROADMAP





FEEDBACK, REFLECTION, ACTION

HOW TO REPORT ON YOUR PROJECT

- **WE WILL SETUP THE PROJECT WEBSITE WHERE EACH WEEK YOUR TEAM WILL BE TASKED TO REPORT ON CURRENT PROGRESS, LATEST EVERY FRIDAY EVENING**
- **WE WILL PROVIDE YOU WITH FEEDBACK AND MAKE SUGGESTIONS ON YOUR PROJECT**
- **ALL TEAMS CAN SEE ALL REPORTS / MODIFY THEIR PROJECTS ON THE BASIS OF THIS REPORTS**
- **EVERY WEEK WE WILL HAVE A LECTURE/MEETING WORKING THROUGH PAIN POINTS**



LEARNING

F

GRADING CRITERIA 100 POINTS MAX

72 points – weekly PROGRESS REPORTS

28 points – FINAL DEMO



EVALUATION

F

BUILDING ON CAPSTONE **PROJECT WAS A SUCCESS?**

- **CONTINUATION – MAKE SURE THAT YOUR PROJECT WILL BE FEASIBLE AFTER CAPSTONE**
- **MENTORSHIP – FIND MENTORS FROM THE FACULTY OR INDUSTRY**
- **LEADERSHIP – BUILD YOUR TEAM FURTHER – RECRUIT MORE ENGINEERS**



FUTURE PROGRESS



WEEK ONE

WHAT TO DO?

**INSTRUCTIONS WILL BE PUBLISHED ON OUR SHARED BLOG
EVERY WEEK, PUBLISH THEIR PROGRESS IN THE BRANCH
WE WILL EVALUATE YOUR REPORT AND GIVE FEEDBACK
WE'LL HAVE WEEKLY MEETINGS WITH TEAMS**



DELIVERABLES FOR THE WEEK ONE



QUESTIONS?

INSTRUCTIONS ARE ONLINE

VISIT [CAPSTONE.INNOPOLIS.UNIVERSITY](https://capstone.innopolis.university)



DELIVERABLES FOR THE WEEK