

Cross-Platform Mobile Application for Gaming Community

Project Proposal

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Higher Diploma in Science in Computer Science

Project type: Independent

Project category: Hybrid

Technologies:

- *Software:* Flutter, Dart, Node.js, JavaScript, TypeScript, Hapi.js
- *Hardware:* Android & iOS devices

Tools and frameworks:

- Flutter SDK
- Android Studio
- Visual Studio Code
- Git & GitHub

Project process: The development will be carried out in phases, ensuring each feature is correctly implemented and tested.

Stakeholders:

- Community members – The primary users who will benefit from real-time updates, information and features designed to help them thrive within the community.

Proposal:

A little bit of background:

For the past 12 years I've been hosting and developing unique game servers, mainly focused on competitive first-person shooter game called Counter-Strike. Early on I was asked by players in-game to create a website with a forum on it and that's how my gaming community was born.

The community has grown, my services evolved, becoming a hub & a platform of sorts for like-minded people oriented around gaming. This project aims to further enhance the user experience by introducing a cross-platform mobile application. This application will not only provide news updates and in-game statistics but will also integrate features like live server information, membership purchases, in-game currency, events calendar, authentication via Steam OpenID, polls & more.

The proposed mobile application seeks to encapsulate the essence of my 12-year-old community platform, offering members a seamless and enriched experience.

By integrating key features and ensuring user-friendly navigation, I aim to elevate the platform's reach and engagement.

Additional information:

- 6,512 Total members in Forum (<https://vimo.lt/forums>)
- 3,740 Total members in Discord (<https://discord.gg/vimo>)

Became the biggest gaming community in Lithuania around 2017, but recently Valve (company that created Counter-Strike) released a new version of the game built on different, Source2 engine – effectively destroying community servers like ours with no official support for them. But we'll bounce back!

A similar app will first be developed for Mobile App Development (Native Android app), but that will be developed with Kotlin – completely different language and framework. Backend server (API endpoints developed with Node & Hapi) is already in development & will be expanded for this Final project – mostly just API endpoints to provide data for the app.

I would like to keep my GitHub repo's private (no issue in inviting necessary people) – this app will end up in Google Play Store & I have plans to commercialize it with ads in the future if it's successful enough.

Few informational screenshots from GameTracker (<https://gametracker.com>):



Rank ▼	Gm	Server Name
92.	👤	Vimo.lt [AWP ONLY] - 128T !ws !knife
98.	👤	[LT/EU] Public # Rampage.lt - Anubis Collection skins, Agents, Kn
139.	👤	Vimo.lt [DEAGLE ONLY]
182.	👤	Vimo.lt [AWP ONLY]
224.	👤	Vimo.lt [PUBLIC]
314.	👤	Vimo.lt [MIX] - 128T !ws !knife
408.	👤	Vimo.lt [SURF NORMAL TIER-1-2] - 100T !ws !gloves
408.	👤	Vimo.lt [SURF EASY TIER 1] - 100T !ws !gloves
531.	👤	Vimo.lt [FUN MULTIGAMES] - 128T !ws !gloves
531.	👤	[LT/EU] Deagle Only, Anubis Collection skins! <128 Tickrate> # Ra
531.	👤	Vimo.lt [SURF HARD TIER-1-8] - 100T !ws !gloves
531.	👤	[LT] Mix/Scrim/Gather # Rampage.lt Anubis Collection skins [NEE
666.	👤	Vimo.lt [SURF COMBAT] - 100T !ws !knife !case
666.	👤	Vimo.lt [MIX]
756.	👤	Vimo.lt [COMBAT SURF TRAINING] - No Jail & Respawn !ws !knife
Rank ▼	Gm	Server Name

Figure 10-1 Servers sorted by rank world-wide

Rank	Gm	Server Name	Players ▲	Loc
224.		Vimo.lt [PUBLIC]	20/32	
531.		Vimo.lt [SURF HARD TIER-1-8] - 100T !ws !gloves	5/32	
666.		Vimo.lt [MIX]	4/11	
756.		[LT] BACHURU SERVAS >>RETAKES<<	3/13	
756.		Vimo.lt [COMBAT SURF TRAINING] - No Jail & Respawn !ws !knife	1/32	
666.		Vimo.lt [SURF COMBAT] - 100T !ws !knife !case	1/32	
756.		Vimo.lt [WC3] Warcraft3, OG 1.6 war3 mod - 128T Custom Races	1/32	
531.		Vimo.lt [FUN MULTIGAMES] - 128T !ws !gloves	1/32	
756.		Vimo.lt [JAILBREAK] - 128T !ws !gloves	1/40	
314.		Vimo.lt [MIX] - 128T !ws !knife	1/15	
92.		Vimo.lt [AWP ONLY] - 128T !ws !knife	1/32	
1605.		[LT] FRAGAS.LT [#1] Public Serveris	1/32	
756.		Vimo.lt [FFA DM] - 128T !ws !knife	1/32	
756.		Vimo.lt [SURF UTOPIA] - 100T !ws !knife	1/32	
531.		[LT/EU] Deagle Only, Anubis Collection skins! <128 Tickrate> # Ra	0/40	

Figure 1 -2 Servers sorted by player count after update

Serveriai

V-Pub Public bar with fun maps !case !TWS !LT/EN/RU <small>Current Map: de_inferno_night</small>	cs.vimo.lt:27020	1 / 32		
1v1 Arena #1 128T !ws !gloves <small>Current Map: am_dust2014_vim</small>	cs.vimo.lt:27015	41 / 41		
AWP Only 128T !ws !gloves <small>Current Map: fy_pool_day_vim</small>	cs.vimo.lt:27017	30 / 41		
Deagle Only 128T !ws !gloves <small>Current Map: deaggle</small>	cs.vimo.lt:27019	20 / 32		
Warcraft Surf + Public Wc3/Wcs !ws !gloves <small>Current Map: aim_headshot_rc</small>	cs.vimo.lt:27026	9 / 32		
Classic Surf-Combat !ws !gloves <small>Current Map: surf_ski_2</small>	cs.vimo.lt:27025	8 / 32		
Training Surf No-Jail & Respawn !ws !gloves <small>Current Map: 589501674_surf_ski_2</small>	cs.vimo.lt:27027	19 / 32		
Skill Surf Easy TIER-1 100T !ws !gloves <small>Current Map: surf_summit</small>	cs.vimo.lt:27038	23 / 32		
Skill Surf Normal TIER-1-2 100T !ws !gloves <small>Current Map: surf_whiteout</small>	cs.vimo.lt:27028	26 / 32		
Skill Surf Hard TIER-3-6 100T !ws !gloves <small>Current Map: surf_oasis</small>	cs.vimo.lt:27048	10 / 32		
Skill Surf 64T TIER 1-2 !ws !gloves <small>Current Map: surf_forbidden_ways_ksf</small>	cs.vimo.lt:27049	7 / 32		
JailBreak !ws !gloves <small>Current Map: jb_mario_rescue_v1_2</small>	cs.vimo.lt:27018	20 / 40		
Fun Multigames 128T !ws !gloves <small>Current Map: mg_nimafa_3_finalLv3</small>	cs.vimo.lt:27030	24 / 32		
Zombie Plague server <small>Current Map: 415942529_zm_dustway</small>	cs.vimo.lt:27024	7 / 32		

14¹⁴

TOTAL SERVERS

52.53%

% FILLED SERVERS:

249 / 474

TOTAL PLAYERS

436

MOST PLAYERS

PRIEŠ 1 MIN.

PASKUTINĮ KARTĄ ATNAUJIINTAS.

Figure 1-3 Daily number of players before the update

Appendix

This Ethics Checklist must be completed for all final year undergraduate, taught postgraduate and research projects in the School of Science and Computing.

View your response(s)

 Respondent: **Vidmantas Valskis** (Group: CM-HDIPCS) Submitted on: Saturday, 18 November 2023, 3:18 PM

Ethics Checklist for Undergraduate, Taught Postgraduate and Research Projects in the School of Science and Computing

All students in the School of Science and Computing who are either (1) in the final year of an undergraduate/BSc degree, or (2) on a taught postgraduate/MSc programme **must complete this Ethics Checklist before conducting their project** regardless of the project type or discipline. The Checklist should also be completed by anyone (whether staff member or student) conducting a **research project** (whether programmatic or not) within the School.

The purpose of this Ethics Checklist is to **identify projects that will require formal ethical approval** from the School Research Ethics Committee, or the SETU Research Ethics Committee, before they can proceed.

Students/applicants should note that this Ethics Checklist is a **formal declaration**, and great care must be taken to **answer all questions accurately**. Students should consult with their project supervisors/advisors regarding any aspects or questions that they are unsure of before completing and submitting the Ethics Checklist.

Students/applicants must **answer all questions** presented to them until the Checklist questionnaire is completed.

Feedback Report

?

No human experimentation issues (UG).

No animal experimentation issues (N/A).

No issues regarding the use of human tissues.

No animal tissue or biological fluids issues.

No ionising radiation issues.

No primary data collection issues (N/A).

No underage/vulnerable people issues (UG).

No issues regarding existing/secondary data use (public anonymous and/or with explicit consent).

Note: Full compliance with the EU General Data Protection Regulation (GDPR) and the Data Protection Act (2018) is necessary for any personal data processing.

No controversial data issues.

No issues related to the collection of rare or protected plants.

No issues regarding the use of genetically modified (GM) plant material.

Instructions:

1. If the above feedback is **entirely green** then, based on your answers, there is **no need to apply for ethical approval** for your project.
2. If **any** part of the above feedback is **yellow/amber**, then there is at least one issue with your project that needs to be reviewed and **you must apply for ethical approval** to continue your project.
3. If **any** part of the above feedback is **red** then there is a serious ethical issue and **you cannot continue your project** as currently planned.

It is recommended that you print this Feedback Report to a PDF file for your records. You should also forward and discuss this Feedback Report PDF with your project supervisor. They will be able to advise if you have any further questions or if you need to apply for ethical approval.

1 * Are you a student on a **final year undergraduate** programme, a **taught postgraduate** programme, or are you conducting a **research project**?

- Final Year Undergraduate
- Taught Postgraduate
- Postgraduate Research Project
- Other Research Project

2 * What is the **working title** of your project?

Vimo.It – Cross-Platform Mobile Application for Gaming Community

3 * Who are the project **supervisors/advisors/principal investigators**?

Colm Dunphy / TBC

4 * Does your project involve **human experimentation**?

- Yes No

5 * Does your project involve **live animal experimentation**?

- Yes No

(6) * Is the planned animal experimentation limited to **non-invasive procedures only** (such as feeding, weighing, or taking naturally voided faecal or hair samples), and does **not** involve any invasive procedures (such as taking rectal faecal samples or blood) from live animals?

- Yes No

7 * Does your project involve the use of **human** remains/cadavers/tissues/cells/biological fluids/embryos/foetuses?

- Yes No

(8) * Do you intend to only use established **commercial human cell lines**, and no other **human remains/cadavers/tissues/cells/biological fluids/embryos/foetuses** in your project?

Yes No

9 * Does your project involve the use of **animal cells, tissues or biological fluids**?

Yes No

(10) * Do you intend to only use (1) **established commercial animal cell lines**, or (2) **slaughterhouse-derived tissues/fluids**, or (3) **fluids collected as part of routine animal husbandry** (e.g. milk) and no other animal tissues or biological fluids in your project?

Yes No

11 * Does your project involve the **collection of rare or protected plants**?

Yes No

12 * Does your project involve the generation or use of **genetically modified (GM) plant material**?

Yes No

(13) * Do you agree to (1) only use **established genetically modified (GM) plant cell lines, seeds, or plant products** in your project, (2) **not generate new plant mutations** using chemical or other means, and (3) follow specified SETU **containment and use protocols** for GM plant materials at all times?

Yes No

14 * Does your project involve the use of **ionising radiation**? (e.g. use of gamma ray spectrometry)

Yes No

(15) * Do you agree to carefully **follow the instructions** of the SETU designated **Radiation Protection Officer (RPO)**, and **adhere to all legal requirements** as set out in the Radiological Protection Act 1991 (Ionising Radiation) Regulations ([2019](#)), regarding the use of ionising radiation materials and equipment?

Yes No

16 * Does your project involve the **collection of any new (or primary) data** from **individual people or groups**?

Yes No

(17) * Does your project involve the **collection of any new (or primary) individual or group data** that is **personally or uniquely identifying**? (e.g. data about people or organisations/companies/groups that could be used to identify those individuals or groups; data collection might take any form, including internet and social media data, etc.)

Yes No

(18) * Will you ensure that participants who you are collecting data from are provided with **fair warning** and must provide **explicit informed consent** for any data collected?

Yes No

(19) * Will you ensure that any project-related data collection, data storage, and data use is in **full compliance** with the **EU General Data Protection Regulation (GDPR)** and the **Data Protection Act (2018)**?

Yes No

(20) * Does any of the data that you intend to collect include **sensitive or private personal information** about individuals, or **commercially sensitive information** about organisations/companies/groups?

Yes No

21 * Does your project involve **persons under the age of 18 years** (i.e. minors), or **any vulnerable groups**? (e.g. prisoners, refugees, those in care, addiction service users, etc.)

Yes No

22 * Does your project involve the use of **existing (or secondary) human data**? (i.e. data originally collected for another purpose)

Yes No

23 * Is the existing or secondary human data you intend to use either (1) **anonymous/non-personally identifying** and in the **public domain**, or (2) available with **explicit and specific informed consent or permission** for the data to be **legally** reused in the way you intend?

Yes No

24 * Are any aspects of the primary/secondary data you intend to use for the project **controversial** in nature?

Yes No

25 * Before you submit the Ethics Checklist, you must **confirm all of the following**:

- I understand that the Ethics Checklist is a formal declaration.
- I have answered all questions on the Ethics Checklist carefully and truthfully.
- The supervisor/advisor (or principal investigator) for the project is present as the Ethics Checklist is being submitted, or they have given me explicit permission to submit it in their absence.
- I have had adequate ethics training and/or instruction prior to completing the Ethics Checklist.
- I understand, and agree to abide by, the general ethical principle of "do no harm" for this project.
- I will follow the instructions given in the Feedback Report.

26 * Authentication Code (ask your project supervisor/advisor for this code)

Enter Student Number:

Enter the Authentication Code below and click "Verify Code"

Note: If an INVALID authentication code is used then this submission is NULL and VOID