Presented by G1T2

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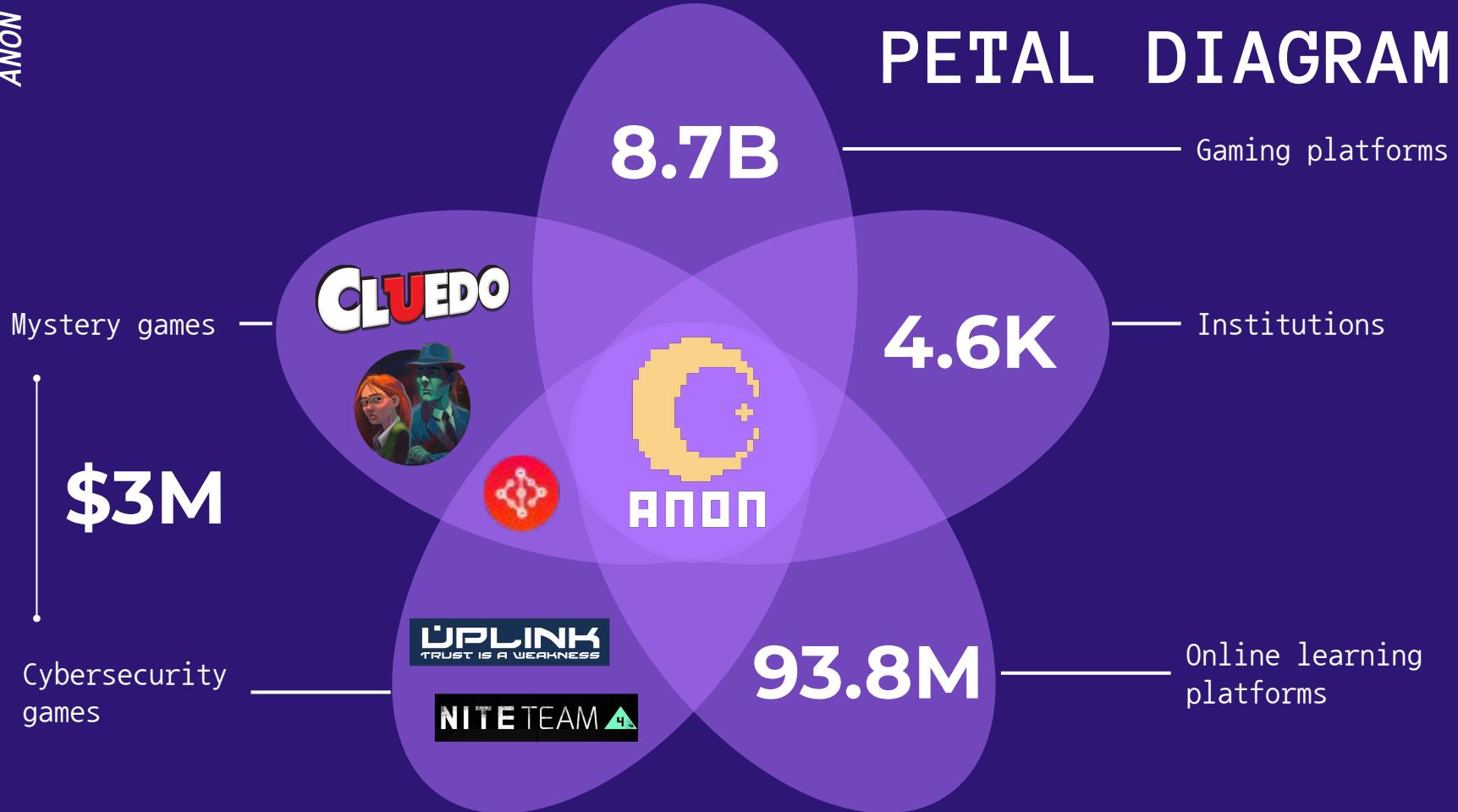
UPDATE PRESENTATION

ANON
GAME PROTOTPYE

PRODUCT VISION

" **ANON increases awareness of cybersecurity** methods and dispels common misconceptions of the field by **providing an immersive experience for users** to learn and pick up simple cybersecurity skills "
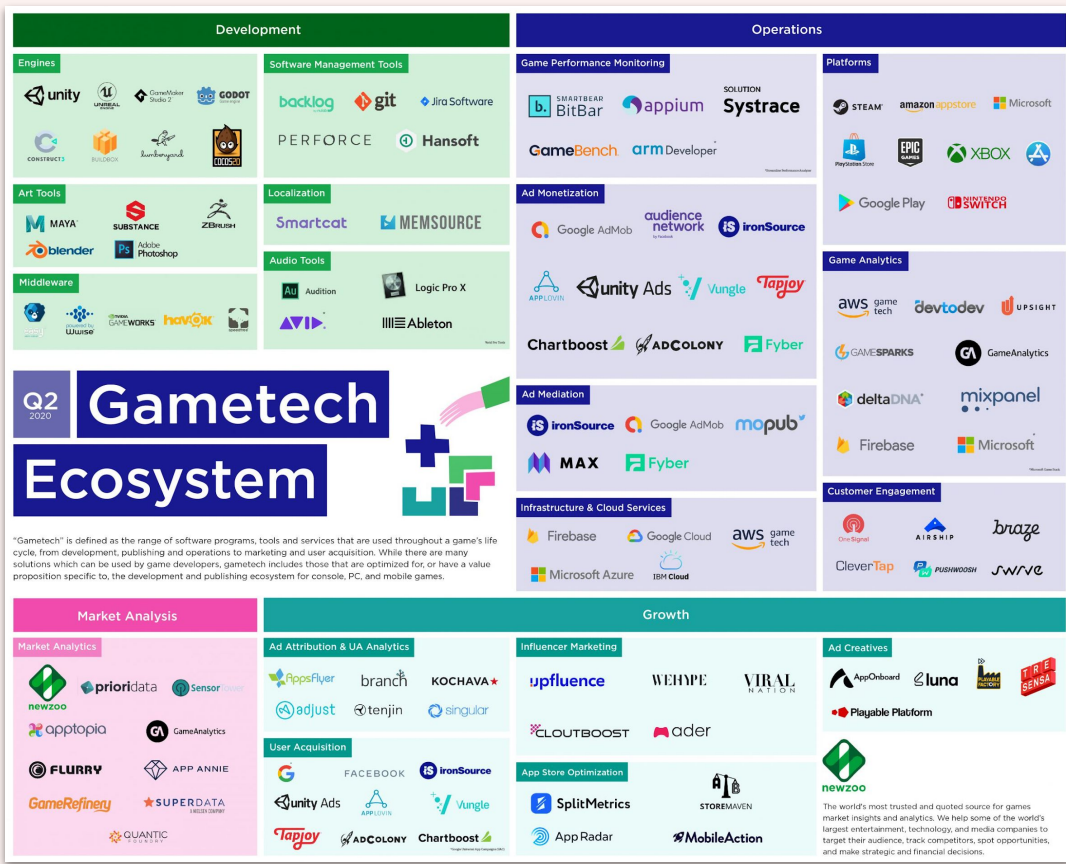
ANON

PETAL DIAGRAM

8.7B — Gaming platforms

Mystery games —

4.6K — Institutions

$3M

ANON

Cybersecurity games —

93.8M — Online learning platforms

GAMETECH ECOSYSTEM

MINIMUM VIABLE PRODUCT

MINIMUM VIABLE PRODUCT

- Game tutorial
- Single player level 1

CHALLENGES

- Adapting to available libraries
- Creating cohesive art

PERFORMANCE METRICS

PERSPECTIVE	MEASURES
Customer	Beta testing, A/B testing, Net promoter score, Qualitative customer feedback
Financial	Monthly recurring revenue, Profitability
Internal Business	Keyword metrics, Social media marketing, Traffic rates
Innovation and Learning	Human capital measures

RISK MANAGEMENT

- **Technical materials not up to reality standards**
  - Product/Market fit
  - High risk, Low uncertainty
  - Mitigation: Seek professional help in early development stages

- **Focus placed too greatly on game/entertainment rather than education**
  - Problem/Solution fit
  - Low risk, Low uncertainty
  - Mitigation: Gather feedback from users regularly, check updates against vision

- **Delays in development timeline**
  - Growth phase
  - High risk, High uncertainty
  - Mitigation: Use project management tools (eg. Kanban) to stay on task, update each other on progress regularly
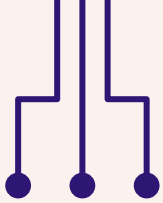
FUNCTIONAL REQUIREMENTS

System Requirements

- Game should be played on browser, not mobile phone

- Minimum requirements: Browser with WebGL support

User Requirements

- Users should be able to click and pick up objects

- Users should be able to move around game space

- Users should be able to resume game

QUALITY REQUIREMENTS

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Usability

- Buttons should be obvious
- Icons should be easily read
- Text size should be readable

Scalability

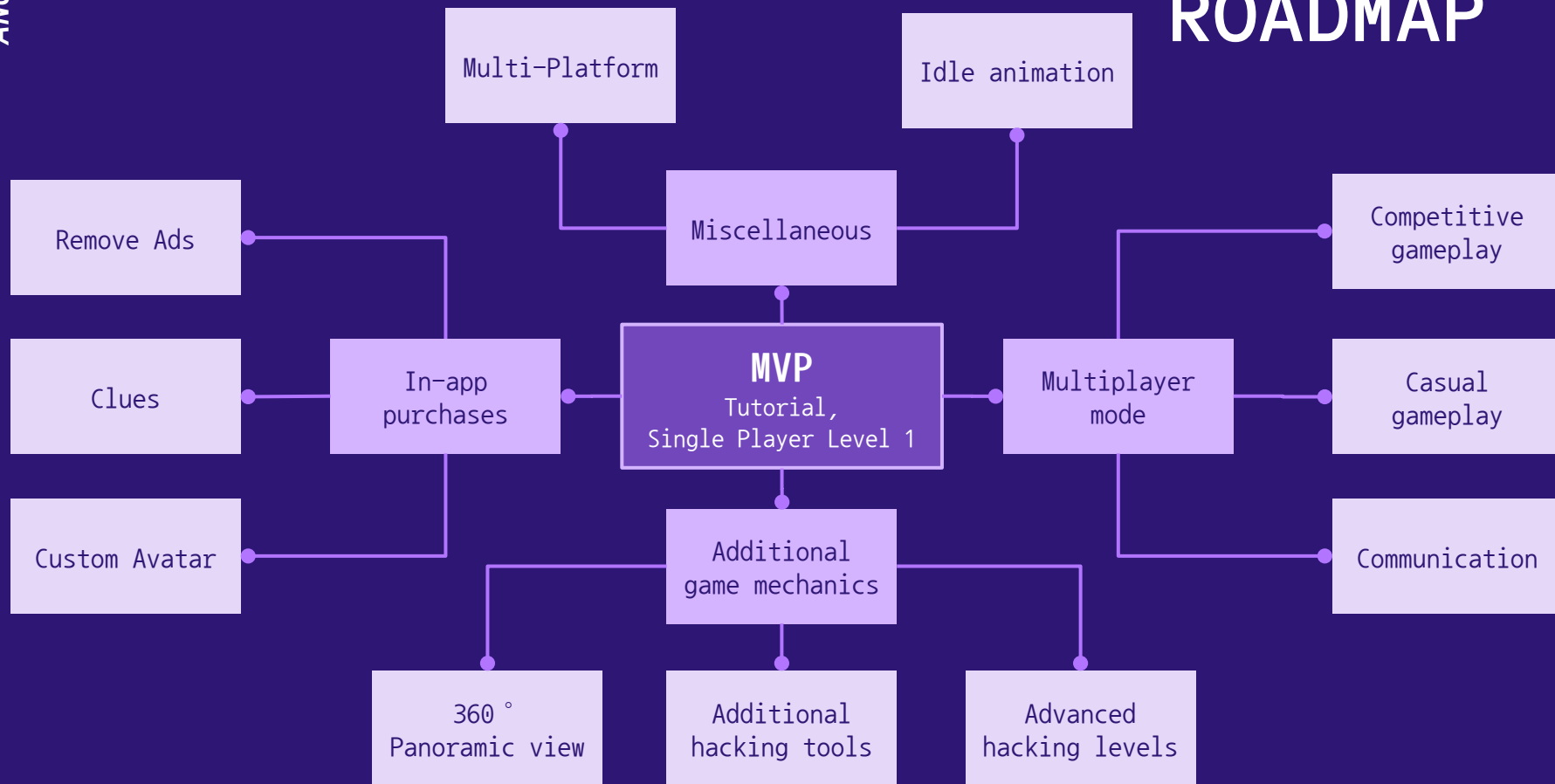- Game should be able to run on browsers which support WebGL

Performance

- Game should be able to run with minimum latency
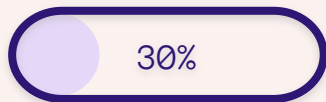
Security
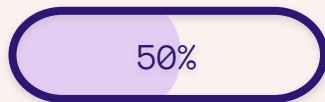
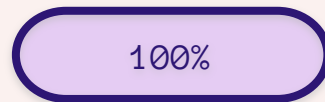- Game should not access user's personal data

IMPLEMENTATION PLAN

30%

- Basic UI
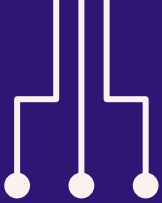- Bare minimum of inventory & investigative systems

WEEK 7

50%

- Game Tutorial
- Partial Level 1

WEEK 10

100%

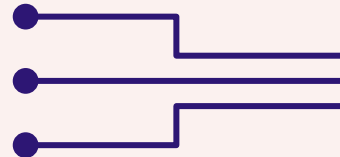- Game Tutorial
- Single Player Level 1

WEEK 13

CHALLENGES

CURRENT CHALLENGES

- Time Management
- Technical Barriers

ACTION PLAN

- Adopt a balance between social and work
- Seek advice from people with experience early

FEEDBACK

" How long will it take? "

FULFILLING PROJECT REQUIREMENTS

Week 5 - 13
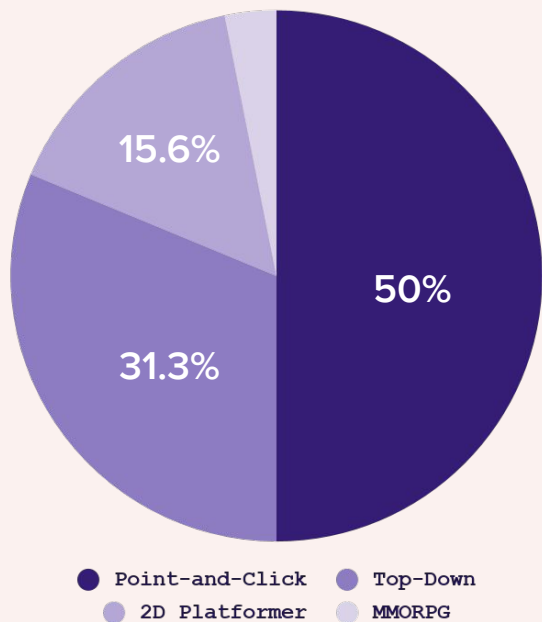
- Game Tutorial 1
- Single Player Level 1

FUTURE PLANS

- **Full game:** 5 levels
  (Single and Multiplayer)

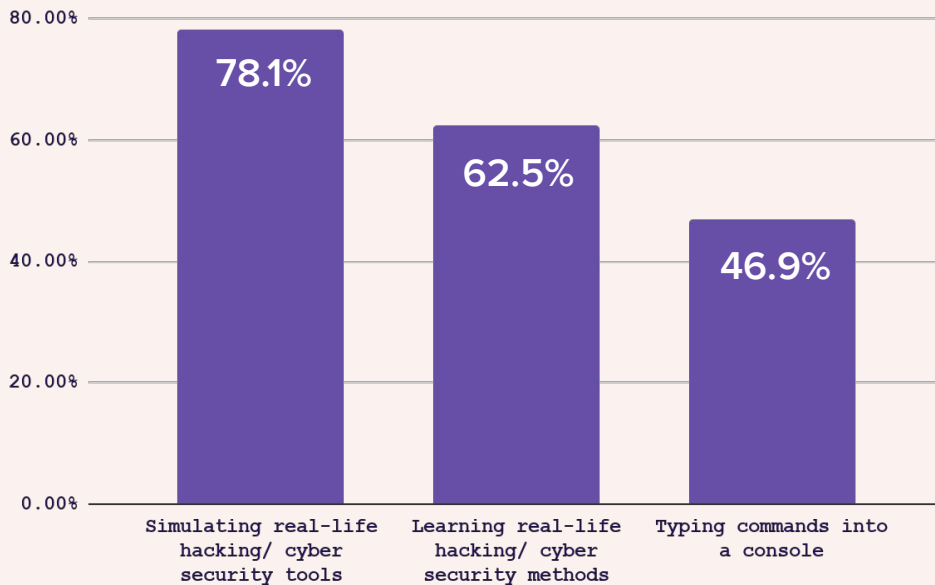- **2 months:** 1 tutorial,
  1 single player level

_____

At least **1 year** for full functionality

MARKET VALIDATION

Preferred Setu~~p~~ ~~S~~ecurity Aspects

15.6%

31.3%

5~~0~~

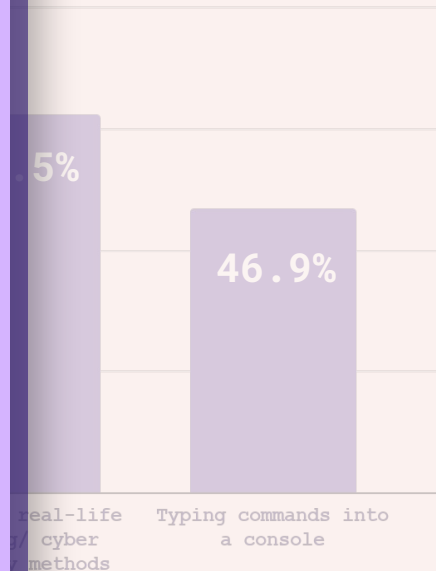## ACTION PLAN

Set up preference: **Point-and-Click**

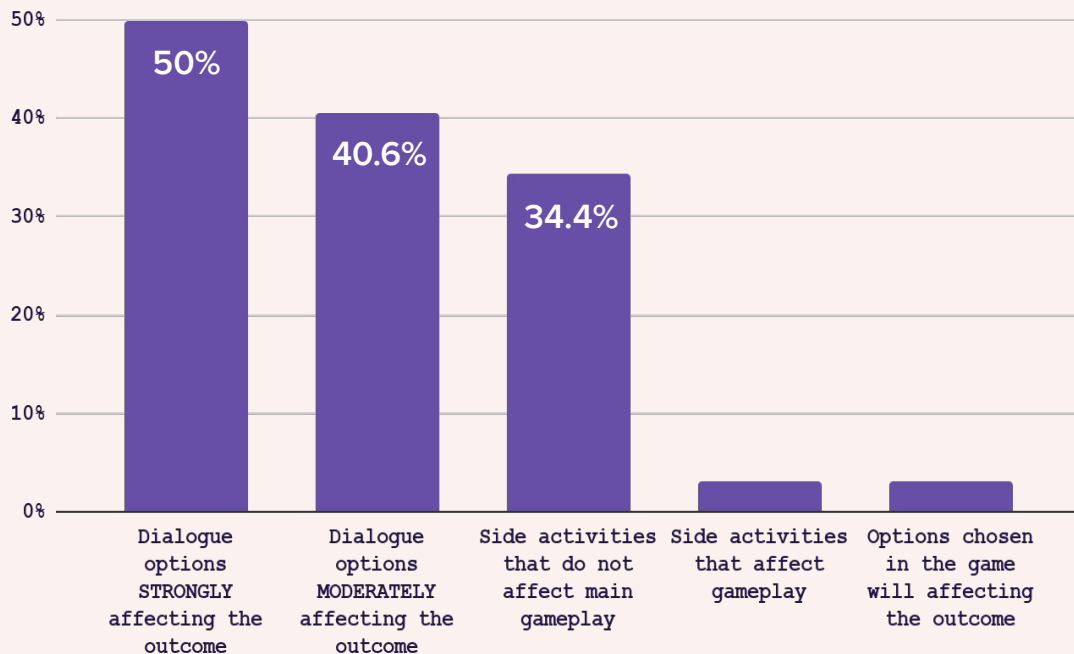Aspects of our game to include:

- Simulating the use of real-life hacking/ cyber security tools

  - by using OSINT

- Learning real-life hacking/ cyber security methods

  - by using tools such as WireShark

● Point-and-Click   ● Top~~~~
● 2D Platformer   ● MMO~~~~

~~~~5%

46.9%

real-life / cyber methods

Typing commands into a console

MARKET VALIDATION

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Preferred *Narrative-Driven* Aspects

Bar chart:
- Dialogue options STRONGLY affecting the outcome: 50%
- Dialogue options MODERATELY affecting the outcome: 40.6%
- Side activities that do not affect main gameplay: 34.4%
- Side activities that affect gameplay: (low)
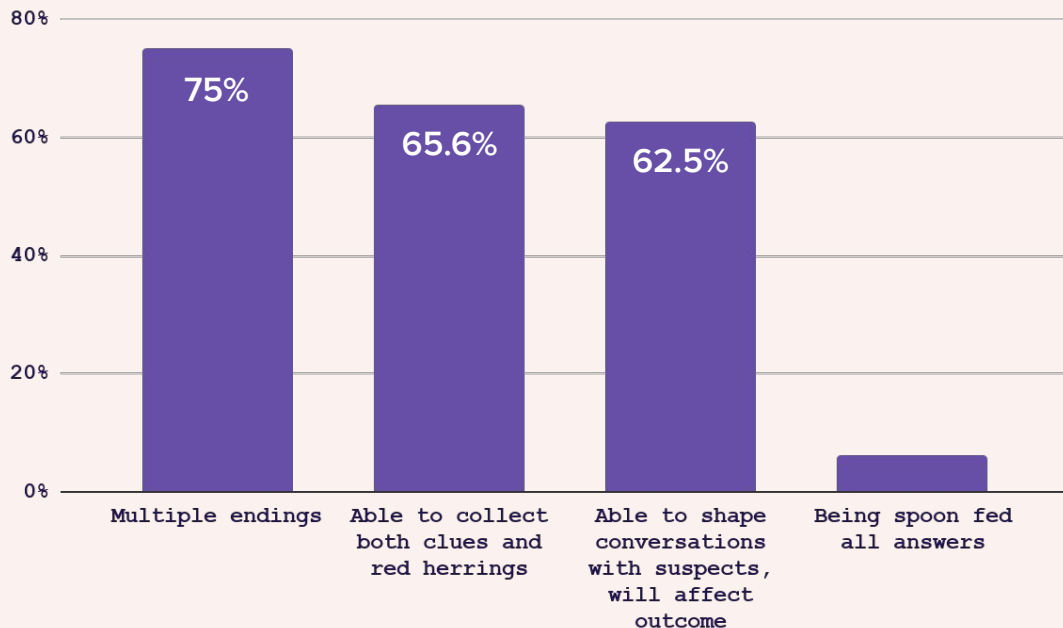- Options chosen in the game will affecting the outcome: (low)

ACTION PLAN

- Most dialogue options will strongly affect game outcome

- Some side dialogue with no effect

- Addition of some side activities with no effect the main gameplay

MARKET VALIDATION

Preferred *Thinking Processes*

Bar chart:
- Multiple endings: 75%
- Able to collect both clues and red herrings: 65.6%
- Able to shape conversations with suspects, will affect outcome: 62.5%
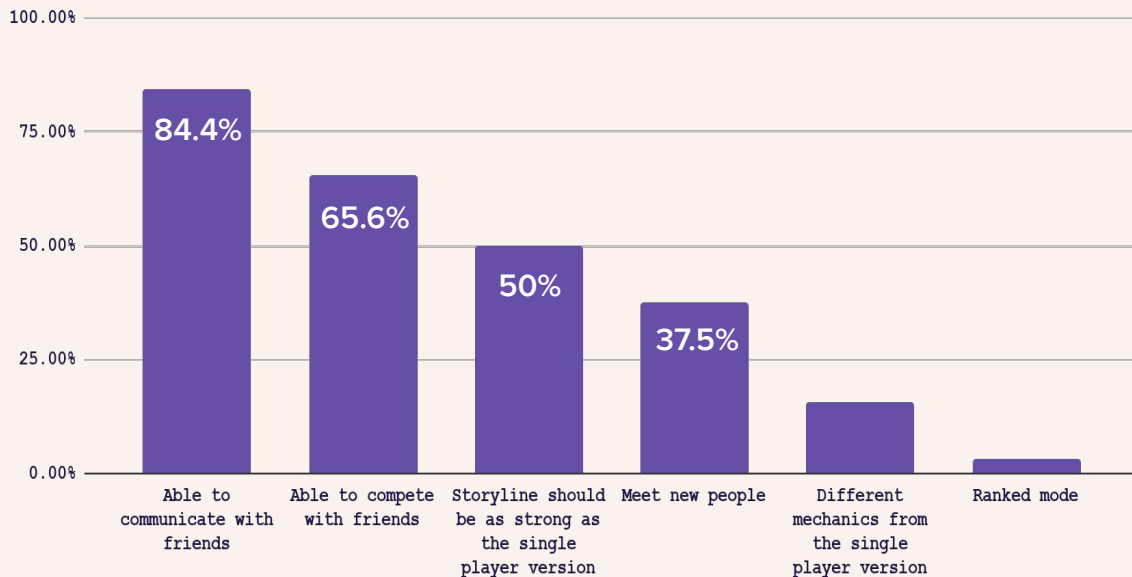- Being spoon fed all answers: (lowest)

ACTION PLAN

- Multiple endings

- Have a backpack function where gamers can collect clues and store them in the backpack

- Different dialogue options in which the user can choose from when speaking to suspects

MARKET VALIDATION

Preferred *Multiplayer* Aspects

Bar chart showing:
- Able to communicate with friends: 84.4%
- Able to compete with friends: 65.6%
- Storyline should be as strong as the single player version: 50%
- Meet new people: 37.5%
- Different mechanics from the single player version: (~15%)
- Ranked mode: (~3%)

ACTION PLAN

- Chat function where players can talk to each other

- Score system: Gamers who get the answer first will gain the highest points

- Option to join games with friends or strangers

- Include different perspectives of the different gamers for storyline

DEMO

REFERENCES

- **Steam:** https://en.wikipedia.org/wiki/Steam_(service), https://www.statista.com/statistics/308330/number-stream-users, https://comparecamp.com/steam-statistics/#TOC4
- **Youtube:** https://ahrefs.com/blog/most-visited-websites/
- **Itch.io:** https://www.similarweb.com/website/itch.io/
- **Twitch:** https://www.businessofapps.com/data/twitch-statistics/#1
- **SMU:** https://www.smu.edu.sg/sites/default/files/smu/statistical_highlights_20200914_1.pdf
- **NUS:** https://www.nus.edu.sg/registrar/docs/info/student-statistics/enrolment-statistics/undergraduate-studies/ug-enrol-20202021.pdf
- **NTU:** https://www.ntu.edu.sg/AboutNTU/CorporateInfo/FactsFigures/Pages/undergraduatepopulation2010-2021.aspx
- **TED:** https://www.similarweb.com/website/ted.com/#overview
- **Udemy:** https://www.similarweb.com/website/udemy.com/#overview
- **Coursera:** https://www.similarweb.com/website/coursera.org/#overview, https://www.investopedia.com/articles/investing/042815/how-coursera-works-makes-money.asp
- **Skillshare:** https://www.similarweb.com/website/skillshare.com/
- **CyberClues:** https://www.sysgroup.com/cyber-clues
- **GameTech Ecosystem:** https://www.ironsrc.com/blog/what-is-gametech/

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THANK YOU

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Business Model Canvas

Key Partners

1. Steam
2. Itch.io
3. Game Jolt
4. Gog
5. Humble Bundle
6. Kongregate
7. Gamers Gate
8. Game House
9. Telecoms
10. Mediacorp
11. Singapore Police Force
12. DSTA
13. Govtech

Key Activities

1. Developing app
2. Designs of assets
3. Maintaining Infrastructure (server/app)
4. User adoption
5. Marketing/Promotion
6. Feedback/Survey
7. Looking for partners

Key Resources

1. Money
2. Time
3. Internet
4. Designing
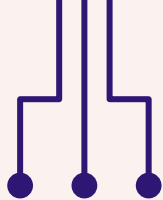5. Computers
6. Servers
7. In-House Game Devs
8. Patents & Copyright

Value Propositions

1. Beta testers
2. A fun & immersive learning experience
3. Trial-ware
4. Users being able pick up simple cybersecurity skills
5. Data privacy & protection

Customer Relationships

1. Phone
2. Online
3. Social Media
4. Events

Channels

1. Social Media
2. Blogs
3. Email
4. SEM/SEO
5. Viral Marketing
6. Offline Advertising
7. Steam/Itch.io/Game Jolt, etc
8. Xbox/Playstation

Customer Segments

1. Current Gamers
2. Interest in Cybersecurity
3. Interest in Hacking/Mystery games

Cost Structure

1. Game Development
2. Human Resource
3. Helpline Service
4. Advertising/Promotion
5. Server Cost
6. Patent & Copyright cost
7. SEO/SEM
8. Influencers sponsorships
9. Percentage cut to Game Distributors

Revenue Streams

1. Upgrade-ware/Freemium
2. Adware
3. Micro-transactions (eg, *In-game purchases, DLCs, season passes, loot boxes*)
4. Seasonal items to be bought (limited time)
5. Advertising

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Survey Results

Setup preferred

1. Point-and-Click (50%)
2. Top-Down (31.3%)
3. 2D Platformer (15.6%)
4. MMORPG (3.1%)

Aspects preferred of a hacking/ cyber security game

1. Simulating the use of real-life hacking/ cyber security tools (78.1%)
2. Learning real-life hacking/ cyber security methods (62.5%)
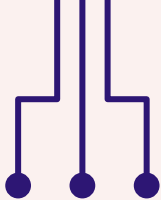3. Typing commands into a console (46.9%)

What we intend to do...

Set up preference: Point-and-Click

Aspects of our game to include:

- Simulating the use of real-life hacking/ cyber security tools

  -> by using OSINT

- Learning real-life hacking/ cyber security methods

  -> by using tools such as WireShark

Survey Results

ASPECTS PREFERRED OF A
NARRATIVE-DRIVEN GAME

1. Dialogue options which Strongly affect the outcome (50%)

2. Dialogue options which Moderately affect the outcome (40.6%)

3. An interesting setting with side activities that do not affect main gameplay (34.4%)

4. Side activities that affect gameplay (3.1%)

5. Every option in the game will affect the games outcome (3.1%)

ACTION PLAN

We will have most dialogue options Strongly affecting the outcome of the game, while also having some side dialogue which does not affect the outcomes. We have also decided to add some side activities which will not affect the main gameplay

Survey Results

ASPECTS PREFERRED OF THE THINKING PROCESS IN THE GAME

1. Multiple endings (75%)

2. Ability to collect both clues and red herrings, not solely clues (65.6%)

3. Ability to shape conversations with suspects that will affect the outcome / ending (62.5%)

4. Being spoon fed all answers (6.3%)

ACTION PLAN

- Multiple endings

- Have a backpack function where gamers can collect clues and store them in the backpack

- Different dialogue options in which the user can choose from when speaking to suspects

Survey Results

ASPECTS PREFERRED OF A MULTIPLAYER GAME

1. Ability to communicate with friends (84.4%)

2. Ability to compete with friends (65.6%)

3. Storyline should be as strong as the single player version (50%)

4. Meet new people (37.5%)

5. Different mechanics from the single player version (15.6%)

6. Ranked mode (3.1%)

ACTION PLAN:
(Multiplayer)

- Having a chat function where players can talk to each other

- Having a score system, where gamers who get the answer first will gain the highest points

- Users will have the option to join games with friends or strangers

- Storyline will include different perspectives of the different gamers

Project update presentation: General content

- Where are you with your team project?

- What are the challenges you have faced?

- What are your plans for overcoming those challenges?

- Do you need to change the scope of the project?

- What do you see as the biggest risks for your project success at this point?

- How do you plan to address those risks?

- Exactly what do you plan to demonstrate during the final presentation in Week 13?

Project update presentation: Specific rubrics

- Each team's presentation needs to include the following
    - From Week 5 class discussion
        - Name and vision statement for your product [1 point]
        - Petal diagram for your product [1.5 points]
        - Description of the minimum viable product (MVP) with details [1.5 points]
            - Why do you think this is a minimum viable product?
            - What are the challenges towards delivering this?
        - Specific performance metrics for your project [1 point]
        - Completed risk management matrix for your product [1 point]
    - From Week 6 class discussion
        - Tree-based roadmap for your product [1 points]
        - Functional and quality requirements for your product [2 points]
    - Discussion of the most important item of progress since the proposal presentation in Week 3 [1 point]
    - [Optional] Demo of product features already in development

Perspective	Business canvas	Sample measures
Financial	Revenue streams and cost structure	Profitability, revenue, market share, acquisition costs
Customer	Value proposition, customer relationships, customer segments	Product use, customer satisfaction, customer perceived value, retention rate, number of registered users, number of active customers, number of installed licenses, conversion rates
Internal Business	Key activities, key partners, channels	Process quality, process cycle time, product quality, development productivity
Innovation and Learning	Key resources	Human capital measures

TREE BASED DIAGRAM

Osint

Hacking

Narrative Driven

Anon

Cyber Security

Murder Mystery