

# Development Team Project - Presentation

## Agenda

- Initial Plan
- Requirement Analysis
- Updated Plan
- Project management method
- Development of Demo / simulation
- Summary

TEAM 1 –

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# Initial Plan

## Project planning phase

### Include

- Requirements collection
- project estimation
- Risk identification

### Deliverables:

#### project charter

- risk register
- communications plan
- confirmed requirements list
- a scope baseline

## Implementation stage

- Product design
- Code development
- Code demonstration of features to the customer
- Customer feedback
- Internal testing

## Work toward the UAT

- Review features
- Test plan design
- Prepare delivery package
- Deliver the product
- Fix the bugs

# Requirement Analysis

## Requirements

ID	Category	Title	Priority
FR-SYS-001	System	Single player game mode	High
FR-SYS-002	System	Single-handed game mode	Medium
FR-OP-001	Operation	Multilingual support	Medium
FR-OP-002	Operation	Multi-input source support	Medium
FR-DSN-001	Design	Indicator sound	High
FR-DSN-002	Design	Parent control	Medium
NFR-SYS-001	System	System bootup time	Medium
TR-SYS-001	System	Efficient data storage	High
TR-SYS-002	System	Efficient data utilization	High

### Project Goal:

To develop a child's toy with software component meeting the latest customer trends in the market

### Team's decision:

A lucky draw like game with two parties battling.

## User stories

ID	User story
FR-SYS-001	<b>As a player I can play against the computer</b> Scenario: Single player enters the game Given that the player is on the landing page When he clicks for single player mode Then he can play against the computer
FR-SYS-002	<b>As a player I can play the game with one hand</b> Scenario: Player wants to play with one hand Given that the player is in the game process When he is playing and uses one hand Then he can control the game
FR-OP-001	<b>As a player I can play in game in different languages</b> Scenario: Player wants to play in another language Given that the player is on the landing page When he clicks for language and select a language Then he can play the game in that selected language
FR-OP-002	<b>As a player I can play the game with more than one input source</b> Scenario: Player wants to play with another input source Given that the player is in the game process When he switches the input source to another Then he can continue the game
FR-DSN-001	<b>As a player I can hear indicator sound during game process</b> Scenario: Player clicks on the button in the UI Given that the player is navigating the game UI When he clicks on buttons Then he can hear an indicator sound
FR-DSN-002	<b>As a parent I can control the play time of children</b> Scenario: Parent sets a time limit Given that the parent is at the setting page When he sets a time limit Then the game will end at the limited time

## Milestones

- 10 Jul 2022 Scope defined
- 24 Jul 2002 Planning phase ended & start execution
- 25 Aug 2022 Development work finished
- 28 Aug 2022 Code demonstration & presentation

Story point voted by team members at the start of the development work

## Sprints Completed

Sprint #	Period	Planned Stories (Story points)	Actual Completed Stories (Story points)
1	25/7/2022 – 31/7/2022	Research for suitable libraries (3) Develop the game mechanics – lucky draw part (5)	Research for suitable libraries (3)
2	1/8/2022 – 7/8/2022	Develop the game mechanics – determine result part (3) Develop multi-input source support (3) Add indicator sound (3)	Develop the game mechanics – lucky draw part (5)
3	8/8/2022 – 14/8/2022	Build the graphical interface (5) Set up database for data storage (3) Build setting for sound control on/off (2)	Develop the game mechanics –determine result part (3) Build the graphical interface (5)
4	15/8/2022 – 21/8/2022	Build parent control feature (5) Develop multilingual support (5)	Develop multi-input source support (3) Build parent control feature (5) Set up database for data storage (3)
5	22/8/2022 – 28/8/2022	Preparation for code demonstration and presentation (5)	Develop multilingual support (5) Add indicator sound (3)

# Updated Plan

- The plan is differed from the original submitted plan
- Each listed task might be reprioritized and replanned after the sprint review meeting

## The updated plan is differed than the initial plan

- Weekly sprint is decided and added into the plan started from week 7
- The updated plan will not stop until December
- 3 phases plan ---> All pending tasks is categorized into 7 parts
  - Each category is marked with different colors
  - Each task in different categories can be progressed by different members at the same time
- More tasks are agreed by teams, and added into the plan
- Original tasks can be break downed into smaller tasks
- Sprint cycles are highlighted in the timetable for easier follow-up

# Project management method

- We stick to our original plan to use the Agile method as the PM method
- We hold *ceremonies* including *sprint planning*, *sprint review* and *sprint retrospective*.
- *Daily standup* was done virtually through Slack.
- Before the start of each sprint, the availabilities of the team and previous *velocity* were collected to calculate the *projected capacity*.
- The team picked up stories that matched the capacity and priority from the *product backlog* and move them to the *sprint backlog* and start the sprint.
- The stories actually picked will be different from originally planned in order to maximize the team's capacity.

# Development of demo/simulation.

## Demonstration of the app

- User interface
- User functions
- Features that meet the requirement



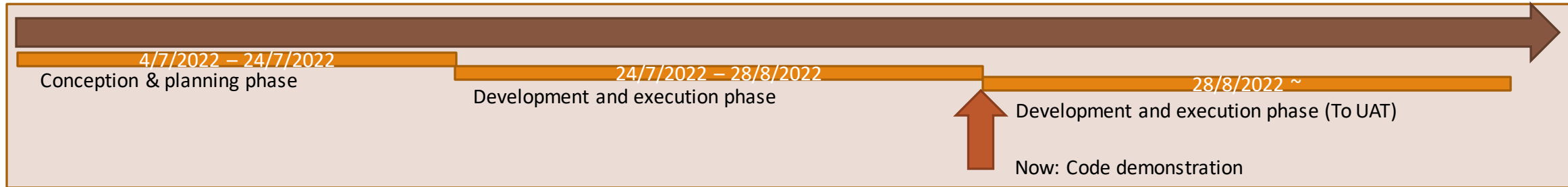
## User stories

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FR-OP-002	As a player I can play the game with more than one input source
FR-DSN-001	As a player I can hear indicator sound during game process
FR-DSN-002	As a parent I can control the play time of children

# Summary

## Project status

5/12/2022  
Launch of UAT



## Project health – On track

### Project status summary:

- Developed a demo including almost all the selected requirements
- Development of requirements is on track
- Cost, scope and timeline stay as planned
- Communication plan is not going as planned, need to improve

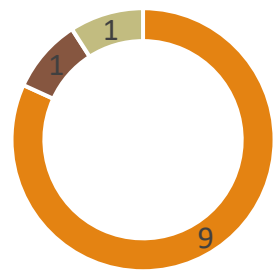
### Estimated timeline to UAT

Average velocity	7 story points/ sprint
Total story points of all requirements from customer	127
Completed story points	35
Remaining story points	92
Estimated remaining time to UAT	13.14 sprints (weeks) (92 story points/7 Average velocity)

Assuming the comments from the demo will take 1 week to fix and the team has accepted:

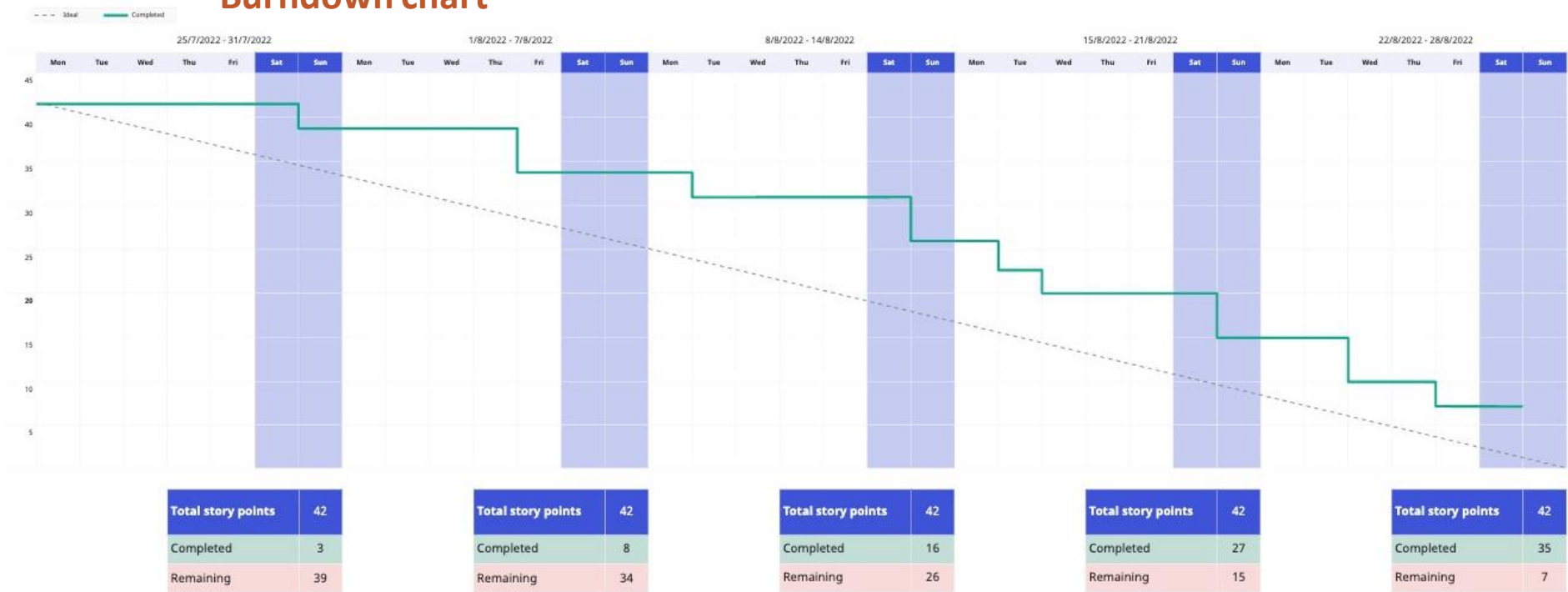


# Story status

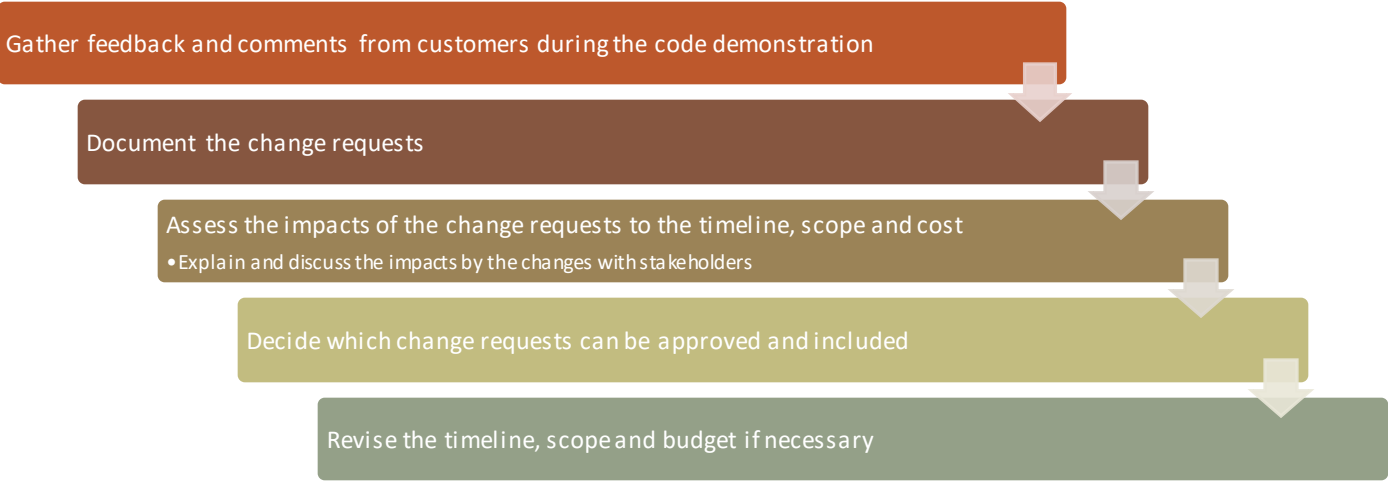


- Finished
- In Progress
- To Do

# Burndown chart



# From Now to UAT



Work towards UAT with the new timeline and scope

# Evidence of the project management process

- Development Plans
  - Initial plan
  - Updated plan
- Trello boards
  - [Link to the Trello board](#)
- minutes from meetings
  - [https://essexuniversity-my.sharepoint.com/:w:/g/personal/hl21922\\_essex\\_ac\\_uk/EToNL\\_22MWBHvbl8k5qj5g4BWxi0exiBGO19SY9DqJ\\_BTQ](https://essexuniversity-my.sharepoint.com/:w:/g/personal/hl21922_essex_ac_uk/EToNL_22MWBHvbl8k5qj5g4BWxi0exiBGO19SY9DqJ_BTQ)
- Resource plans
- [https://essexuniversity-my.sharepoint.com/:x:/g/personal/kc21601\\_essex\\_ac\\_uk/EQrfdPjDo6FPn2mRJDGTckcBLG\\_w4X5eA9-DjLSvTmla4Q?e=Oqihwy](https://essexuniversity-my.sharepoint.com/:x:/g/personal/kc21601_essex_ac_uk/EQrfdPjDo6FPn2mRJDGTckcBLG_w4X5eA9-DjLSvTmla4Q?e=Oqihwy)
- Slack communication

# Budget

Planned	Actual
\$0	\$0

# Forecast Budget

Cloud services, storage etc...  
(from AWS pricing calculator)

Estimate summary

Info

Upfront cost	Monthly cost	Total 12 months cost
0.00 USD	62.02 USD	<b>744.24 USD</b>
		Includes upfront cost

My Estimate

Find resources

<input type="checkbox"/>	Service Name		Upfront cost	Monthly cost
<input type="checkbox"/>	Amazon EC2	<a href="#">Link</a>	0.00 USD	18.40 USD
<input type="checkbox"/>	Amazon RDS for SQL server	<a href="#">Link</a>	0.00 USD	43.62 USD

## Development

- Team has python development experience but is not experienced in developing game with graphical UI
- Time was spent in researching and experimenting the appropriate library and impacted the timeline
- Animation was a barrier during development
- Deviation from ideal burn down rate was observed in sprint#3
- Team inputted extra time to catch up progress starting in sprint#4

## Communication

- Failed to comply with the communications plan
- Communication did not go as frequently as planned with customers
- Customer side did not respond to our side's queries
- Team's communication remained as planned

## Lessons learnt

- Team members' knowledge and skillset have impact on the schedule
- More reserve should be made if team's skill set does not match perfectly with requirements
- If customers do not respond, the team should continue to communicate through a push model
  - eg. Email of status update, post progress report on Slack etc