Communi-gate

Communi-gate: the gateway to success for undergraduates entering the work force.

Problem Space

Group Educan has recognised that there is a lack of development of soft-skills in STEM undergraduate students. Soft skills are considered vital in undergraduates entering the work force, with companies now holding a preference for soft-skills over technical ability.

Collectively, group Educan has focused our research and design towards the development of such skills with the aim of better equipping students with the skills they need to excel in industry.

Aim

Communication, as a soft-skill, is recognised as crucial to both effective collaboration and coordination. These skills collectively contribute to successful team work and thus high communication skills are favoured by employers.

User feedback early on indicated that students often fill a consistent role within their various teams, meaning there is a lack of understanding and experience in differing roles. This becomes problematic in industry when an individual has consistently lead each of their university teams, for example, but is now required to work under someone else.

Context of Use

This concept has been designed to be used by undergraduate students in the early stages of team development. The activity is to be undertaken within a university class - catering for both online and in-person attendees.

The proof-of-concept prototype has been designed to cater for 2-4 team members. This provides flexibility of context and allows interaction by various sized teams.

The design, as a website, utilises Github pages to enable it to be accessed from any browser using a single URL. This facilitates interaction by a team that is either completely or partially online, or simply not all in a consistent location.

Target Audience

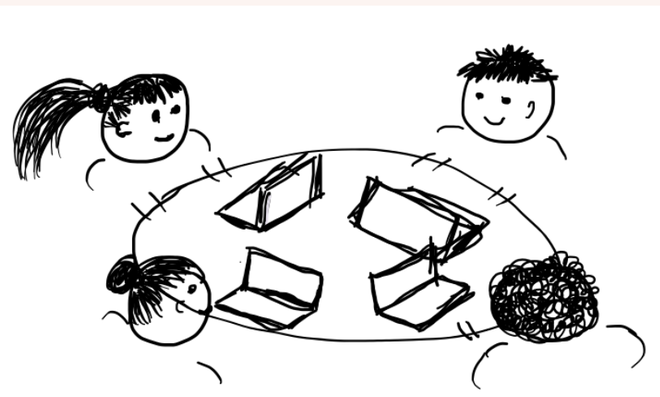
This design is aimed toward STEM students in undergraduate study programs. As a group, we have all designed for the same target audience and under the same problem space or background.

Given our problem space, we have specified undergraduate students as these are students yet to enter the industry and thus those who can benefit most from the development of soft skills.

Resources

Prior research (inclusive of a user survey and literary research) was conducted to scope the problem space and narrow down a specific area within it. Following this, a paper prototype was created and user tested to further narrow the design.

This was part of a continuing iterative design process before arriving at the final design. A high fidelity prototype was developed near the end of this process to collect further user feedback, from which the final proof-of-concept design arose.

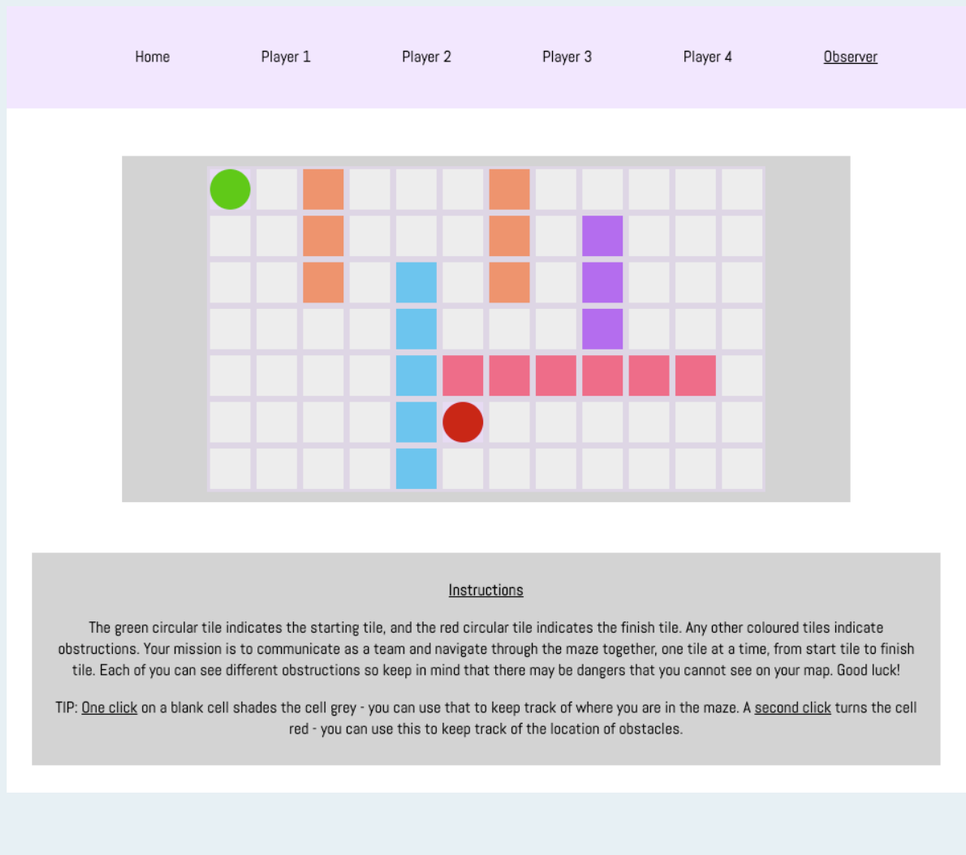


Design

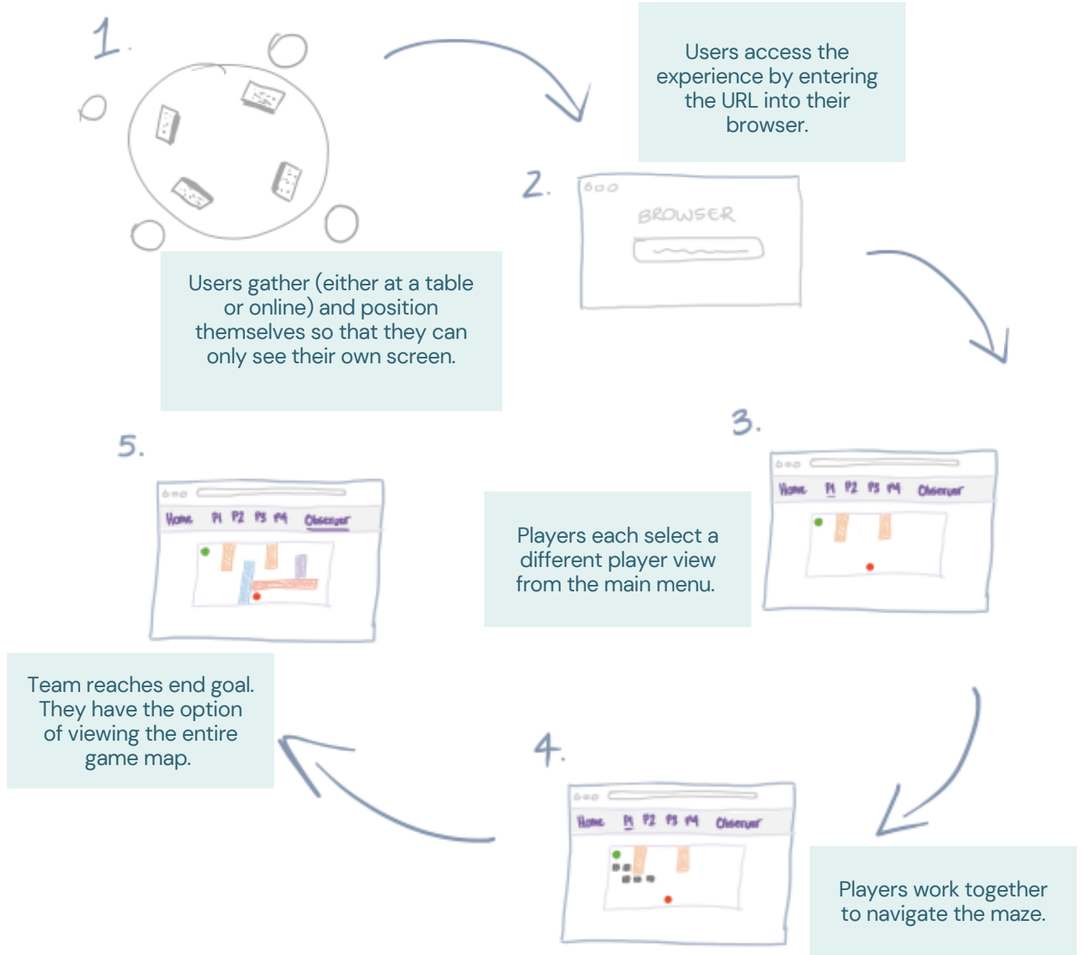
A website with page for each player. Each player views a different perspective of the same game map with certain obstacles only visible to a single player. There is a main navigation menu at the top, which maintains an underline on the current page so the user knows where they are. The instruction panel provides directions to play the game so teams can interact with the experience without needing to be taught how.

The start and end tiles are rounded to ensure they are distinguishable, with the start tile green in colour and the finish tile red in colour. The team can move onto any blank tile which are coloured grey. All other coloured tiles represent obstacles.

Players use their mouse to click a tile when the team moves onto that tile. This will colour the tile a darker shade of grey so the player can keep track of the team's path. Clicking a tile that is already dark grey will colour it red - this feature can be used to mark where you believe an obstacle is. Clicking a red coloured tile will reset it back to a blank light grey tile.



User Interaction Flow



Mobile

Communi-gate has been designed to be used by newly formed teams that are attending their class online, in-person or a mixture of both. This allows flexibility for teams in various course delivery modes. Additionally, the design is accessible by any device connected to the internet with a simple URL as it is hosted by GitHub pages. It has also been designed to cater for teams of various sizes, from 2-4 team members in the proof-of-concept design. The final design is intended to expand the proof-of-concept, providing multiple interactive experiences, not just one. This will cater for teams of differing sizes, and allow teams to participate in multiple experiences, providing further opportunities for development and learning.

Social

Promoting soft-skill development, team Educan's proposals are inherently social-based. The main concept of Communi-gate is to develop and utilise communication skills to reach a shared goal with your new team-mates in a collaborative and interactive exercise. The experience also encourages individuals to vary their role within the team, throughout the activity.

The experience has been designed to be exciting and satisfying on completion, with the aim of making it more memorable. If students remember the experience and the skills they learned, they are able to apply them throughout their degree and once they enter industry.

Source: Icons by Pause08 from www.flaticon.com. Template sourced from www.canva.com