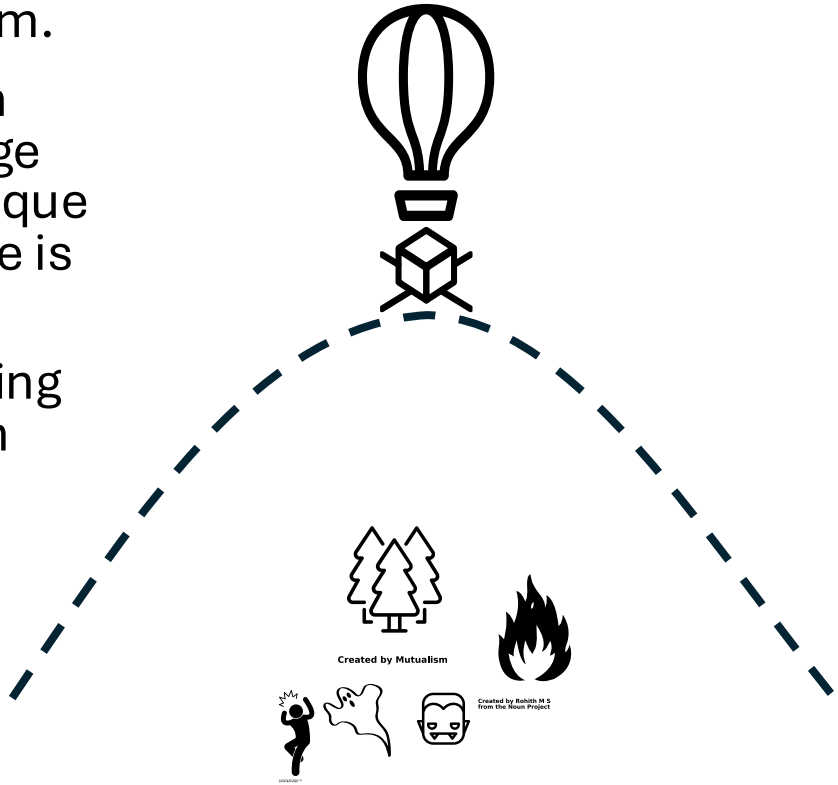
Main Group Name:	Group #

#	**Names**

Assessment exercise:

- The objective of the mission is to demonstrate the capability to detect and track sparkling vampires using a high-altitude balloon system.
- The mission will deploy a balloon carrying an optical payload to provide persistent coverage over a designated region and capture the unique optical signature produced when the vampire is exposed to sunlight.
- The payload may employ multispectral sensing and adaptive modes to maintain observation under varying environmental conditions, including cloud cover and shadows.
- By discriminating the vampire's sparkle from natural and artificial background light, the system will deliver reliable situational awareness.
- Data collected in real time will be transmitted to ground operators, enabling timely monitoring and response.



Exercise:

Preparation (20–30 min before) - Organize groups and materials (Lego sets, paper, pens, cameras/phones). Brief participants on the rotation process intro and rules.

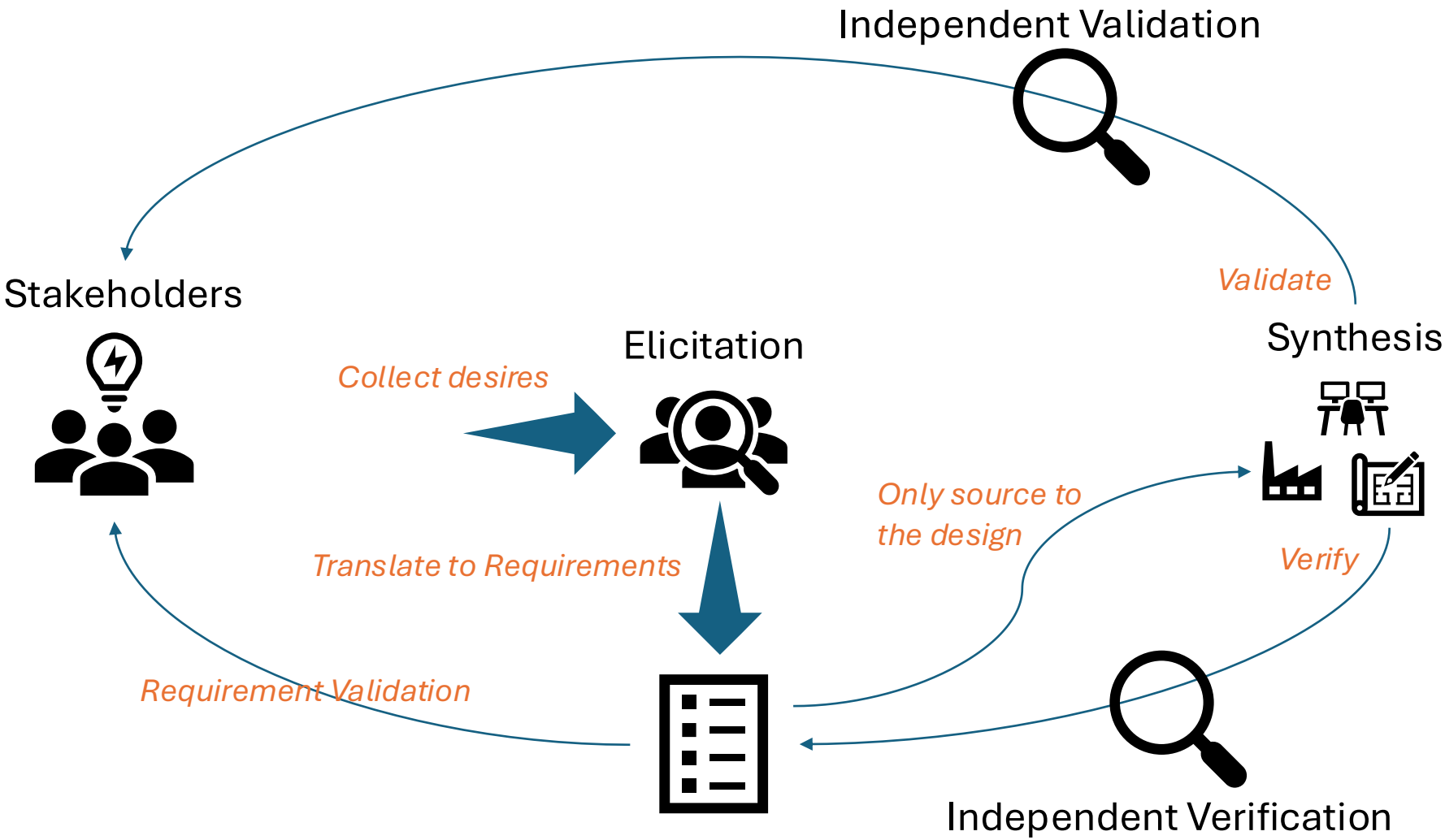
Step 1 – System Design (30 min – Group G(x)) - Each group selects **1 to 10 Lego parts** to design a system that will capture a vampire that sparks during the day. Document your concept (drawings, photos, short descriptions). Capture the *intended desires* of the system — this will serve as the baseline for later Verification & Validation (V&V). **Important: Do not reveal your system to other groups until the end of the exercise.**

Step 2 – Requirements Elicitation (30 min – Group G(x+1)) - Rotate: Group G(x+1) interviews Group G(x). Take notes during the conversation. From the discussion, draft **10 captured requirements** that reflect Group G(x)'s intentions. **Rule:** Your only source of information is the interview (no peeking at drawings, photos, or original Lego models).

Step 3 – System Synthesis (30 min – Group G(x+2)) - Rotate: Group G(x+2) receives only the requirements from Group G(x+1). Based on those requirements, use **1 to 10 Lego parts** to recreate the system. Take photos of **your** solution and prepare it for Verification & Validation.

Step 4 – Verification & Validation (30 min – Group G(x+3)) - Rotate: Group G(x+3) receives the system built by Group G(x+2). Compare it against the **requirements from Group G(x+1)**. Determine whether the system really complies with the requirements. Justify your assessment. Then, return to **Group G(x)** and check if the final system matches the original intention.

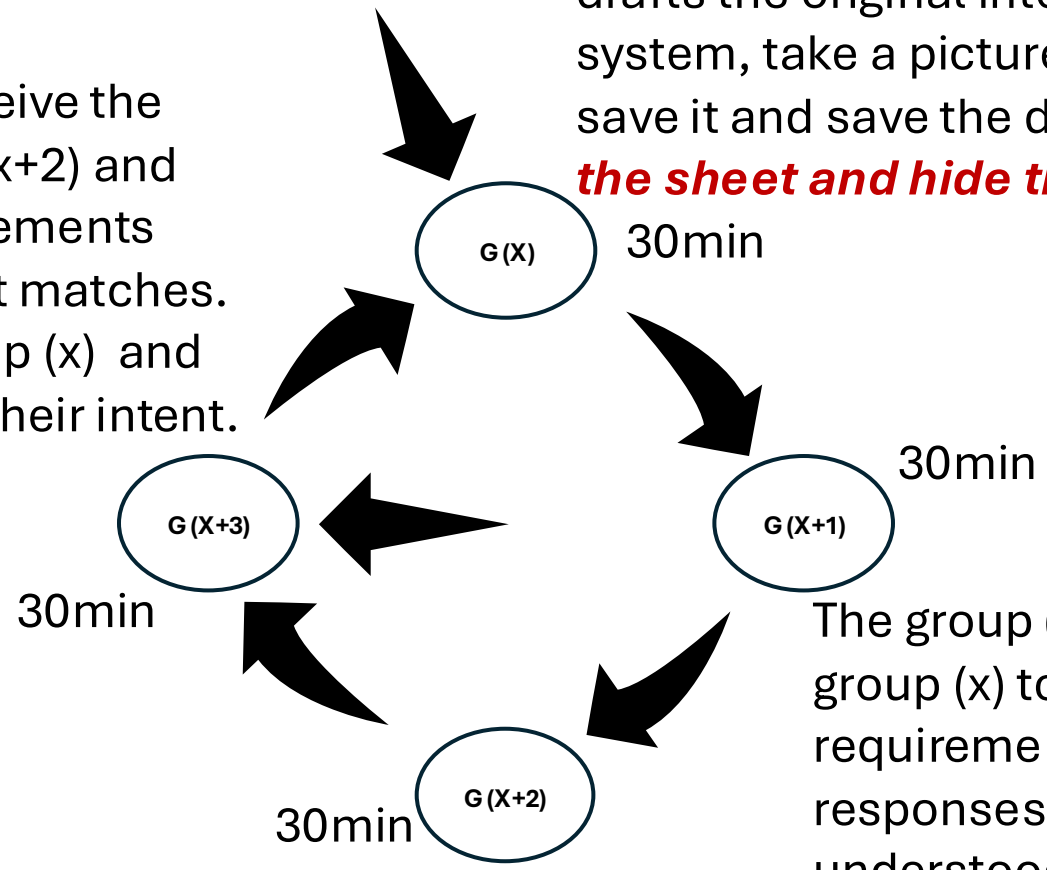
Final Assessment (30 min total) - Each group has **5 minutes** to present: The requirements they elicited; The system they synthesized; Their verification/validation findings.


Independent Validation
Stakeholders
Validate
Synthesis
Elicitation
Collect desires
Only source to
the design
Translate to Requirements
Verify
Requirement Validation
Independent Verification

Instructions

Group (x), that is owner of the system, drafts the original intent. Create a system, take a picture, draft a sketch, save it and save the description. ***(fold the sheet and hide the description).***

Group (x+3) will receive the design from group (x+2) and check w/ the requirements from group (X+1) if it matches. Check with the group (x) and see if it is closer to their intent.



The group (x+1) interviews group (x) to try to capture their requirements, draft the responses and write what they understood as the requirements. **Validate the requirements w/ the Group (x) but you can not see their original descriptions/ pictures/ or anything.**

The group (x+2) receives the requirements and try to rebuild the original system – **ONLY W/ THE REQUIREMENTS from group (x+1).**

(STEP01) Original Group description

Group #

ID	Text

(baseline) Original Group description

Group #



(STEP02) Interview points captured

Group #

(baseline) Captured Requirements

Group #

REQ_ID	Text

(STEP03) Designed System:

Group #

(STEP04) Confirmation from the original group:

Group #

REQ_ID	Approved? (why?!)