Supplementary material for the article, “The Lens of Intrinsic Skill Atoms: A Method For Gameful Design,”
by Sebastian Deterding, published in *Human-Computer Interaction*, pp. 9-10.

Supplementary Material 4:

Picture Match Storyboard

Skill Atom Storyboard

Action & object: User A writes question, picks and sorts images according to his personal order of preference. **Rules:** He has to pick from a random predefined set of images.

Action & object: User B likewise puts the images in her order of preference. User A receives a notification that user B has answered and now has to guess her ranking.

Action & object: User B receives and opens an invitation to the picture match started by user A.

Feedback: User A and B see how many guesses each one got right and where they match. They can send a message on each answer and match to start a conversation.

Challenge: Infer the other user's preferences based on viewing his or her profile. **Goal:** Bring the images in the order the other user put them.

Motivation: Sorting and guessing image orders reduces the fear of writing an awkward first message and gives conversation starters. It also generates curiosity, surprise, and competence.

Title

Picture Match

Core idea

Users send each other image post cards and a question like "my favourite holiday". Users rank post cards according to the question and have to guess the ranking of each other.

Elements

Motivation What motivation fuels the user? How is that motivation satisfied?

Goal What goals does the user pursue? How are they suggested to the user?

Action & object What does the user do with what to achieve that goal?

Challenge What's the learnable challenge inherent in the activity?

Rules What are rules & constraints?

Feedback Immediate: How does the user learn about the success of her action? *Progress:* How does the user learn about her progress toward her motive over time?