



Explore Amasedia; a gaming environment to discover long term effects of land use changes on sediment load

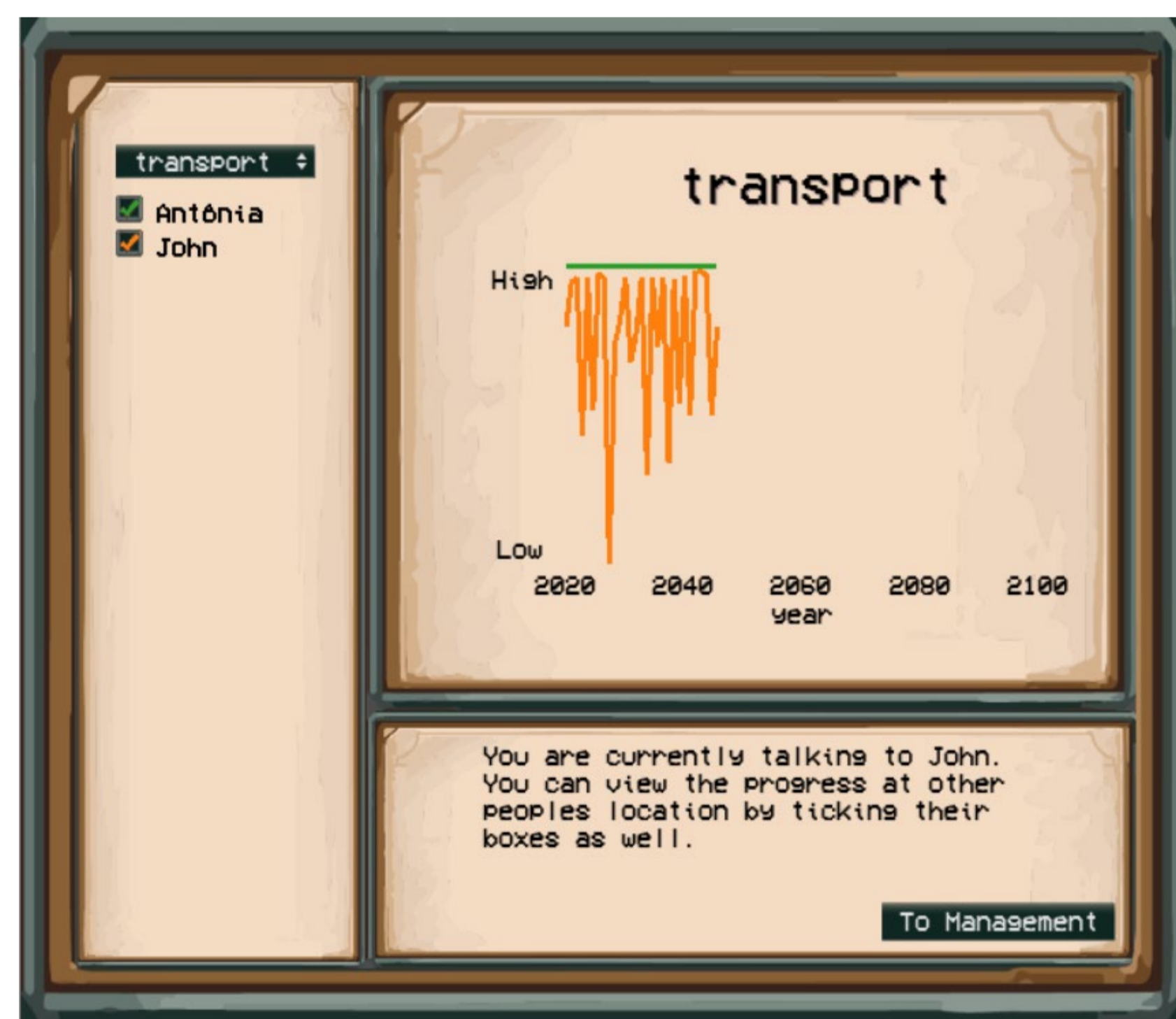
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Are you looking for a unique way to explore the effects of land use change on sediment loads and related issues? Then come and try out our game! Our game is an interactive and immersive experience that allows you to explore different scenarios and make informed decisions. You'll have the opportunity to gain a deeper understanding of the complexities of the issue. So come and play – it's a one-of-a-kind experience that is sure to be both entertaining and educational!

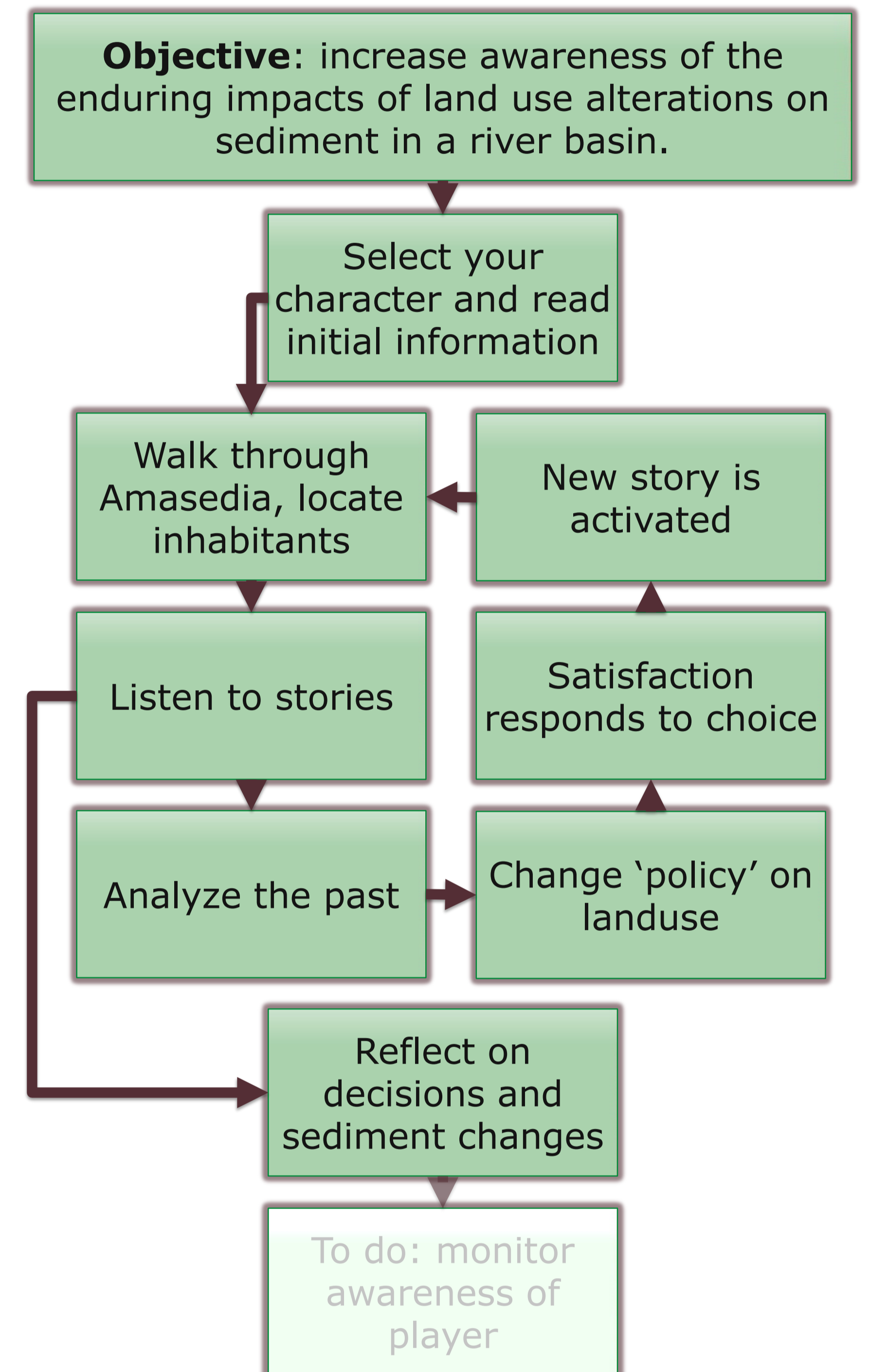
The Amazon Amasedia River

Land use change, such as deforestation and agricultural practices, can increase sedimentation in the Amazon River due to soil erosion and runoff. This can have negative impacts on aquatic ecosystems, navigation, and water quality, leading to challenges such as flooding, sedimentation in

reservoirs, and loss of biodiversity. Conversely, too little sediment can also cause problems, such as loss of fertile floodplain soils and changes in river morphology that can lead to erosion and loss of habitats.



Objective and gameplay in Amasedia

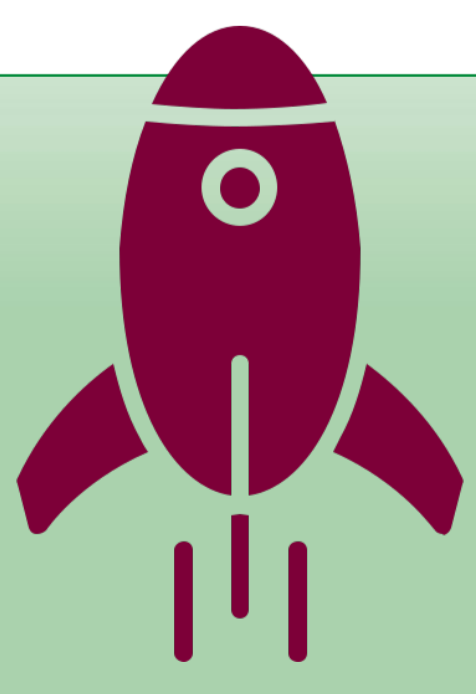


Using AI for game development

AI and specifically ChatGPT can help game developers create more engaging and dynamic text and conversations in their games by providing natural language processing and generation capabilities that allow for more fluid and interactive player experiences. In this case specifically, ChatGPT was used to outsource the otherwise time-consuming task of coming up with start screen messages and in-game conversations. In addition, some of the text on this poster was (re-)written by AI as well.

Use of immersion theory in Amasedia

Immersion in games is a state of complete involvement and engagement in the game world, where the player feels like they are truly part of the game's narrative and environment. Immersion in games can be reached by transportation, presence and flow.

Transportation 

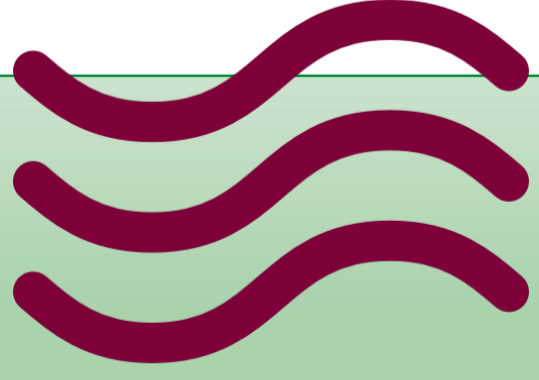
Mental transport into game world creates immersion for learning and exploration.

- Creates immersive simulations with storytelling
- Helps learners experience different scenarios

Presence 

Realistic simulation with advanced tech creates presence for safe and social learning.

- Facilitates social learning experiences
- Helps learners practice skills in safety

Flow 

Engaging gameplay with feedback and difficulty enhances skills and performance.

- Creates challenging gameplay for skill-building
- Motivates players to improve performance