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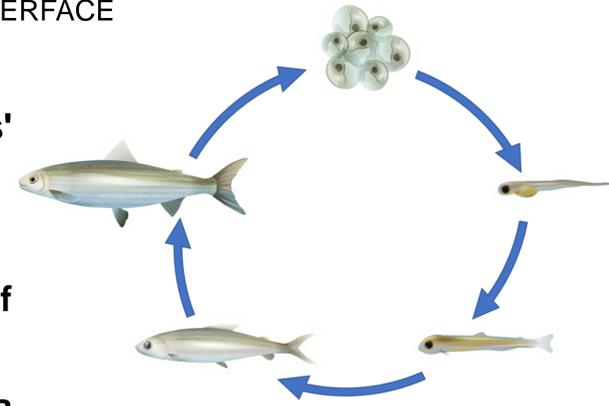
Féaventure, a video game to discover the life cycle of whitefish

Jean Guillard^{1*}, Alain Wiklacz¹, Ethan Perrod¹, Thomas Bocquet¹, Fabien Bourinet^{1,2}, Chloé Goulon¹
 1 – CARRETEL(Univ. Savoie Mont Blanc - INRAE) , 2- SCIMABIO INTERFACE



Introduction

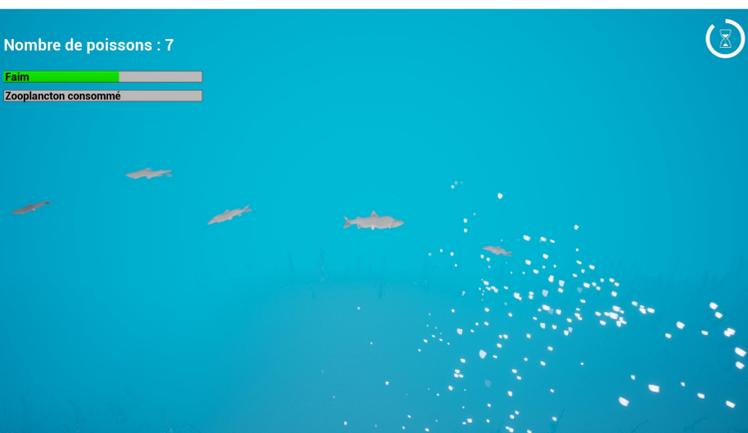
- Serious games : convey information, teach concepts or raise players' awareness of specific subjects in an interactive and entertaining way.
- Féra is the local name of *Coregonus lavaretus*,
- Féaventure: a video game to immerse the player in the life cycle of whitefish, from reproduction to adult stage.
- But the life of fish is not a smooth sailing journey: fish must find a breeding area, feed themselves, and various factors and processes will affect it (fishing, competition, predation, fishing pressure) (Bourinet et al., 2023)



- Target audience : pre-teens
- Why: pre-teens are aware of environmental changes, but not necessarily of all the impacts on aquatic ecosystems.
- It is a starting point for more advanced explanations on environmental drivers and fish population dynamics, especially during laboratory open days or at schools.

Material and methods

- Developed by students with Unreal Engine 5.1 © Epic Games.
- An intuitive graphical editor for 3D creation of virtual worlds, characters, and animations.
- Blueprint scripting language without coding, while also offering C++ programming for more in-depth control.
- The scenario : based of whitefish cycle from literature (Bourinet et al., 2023; Eckmann, 2013) as survival rates, main predators, etc.
- To play: Windows OS with a suitable graphics card.



Conclusion

- ▶ Game promotion video (in French)
- ▶ Next step : tests with kids
 - researchers' Night – Friday 29th Sept. 2023
 - open lab day 08th Oct. 2023)



▶ Try it out and provide us with feedback : it will be greatly appreciated!

▶ Download it



▶ Future: new version with students or a search for funding to have a truly accomplished version.



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