



## Leeds Libraries

Shortlisted for Family Learning to Support  
STEM Learning

**Leeds Libraries is a local authority public library service with 37 libraries around the city of Leeds. They aim to provide communities with free and equal access to information and support, as well as increasing connection, improving wellbeing and promoting equality through learning, literacy and cultural activities. Code clubs take place at libraries across the city to provide access to interesting and innovative technology in a safe and inclusive environment where attendees can develop skills amongst like-minded peers.**

**The Smeaton 300 programme was developed with teachers, engineers, artists, museum curators, and librarians. Leeds Libraries saw an opportunity for a range of services and organisations to work together for a common purpose:**

- **Bring families who attend code clubs at libraries around the city together by working on one project.**
- **Collaborate with museum colleagues to encourage people to visit and to enhance the relevance of historic collections.**
- **Inspire families to learn about John Smeaton, an important figure in Leeds' local history.**
- **Develop STEM skills in an innovative and inclusive way.**

### Family Learning Provision

The Smeaton Lighthouse Challenge is a collaborative platform game themed around John Smeaton's famous lighthouse design. It was created in Scratch (a free online drag-and-drop programming platform) by families who attended code clubs. The service created two levels for inspiration and guidance; each attendee then designed and coded a further level of a Smeaton Lighthouse, creating obstacles that players must navigate to complete the game.

Various learning was captured in this activity, including how gravity works within video games and how this affects game design and gameplay. It encouraged research skills and collaboration, with attendees looking up how existing games worked, or reading about John Smeaton to find information that could be relevant to the game. Participants learned about the importance of quality control, how regular testing can be crucial to creating a successful product, and how the activity links to real jobs.

Leeds Libraries were also able to showcase items from their Special Collections, such as the rare 1791 text 'A Narrative of the Building and a Description of the Construction of the Edystone Lighthouse', which was digitised and brought into communities to



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help demystify this social and cultural capital. Families were encouraged to explore, take an interest in local history, and feel a sense of pride in their city.

Local museums provided free access to families engaging with the project to ensure equitable and inclusive access for all. On-site workshops also took place in a local industrial museum to show the importance of the design process in engineering and real-life use of the skills. This collaboration not only increased inclusive access to local attractions, but also took the attractions out into communities to benefit those who might not be able to travel or attend online.

### Impact and next steps

Each session for The Smeaton Lighthouse Challenge code clubs was fully booked, with feedback forms showing high levels of enjoyment and learning. Parents were pleased to see their children engage with and learn about their local history and reported that this learning had continued at home. Following the challenge, attendance for code clubs has increased.

Judges from NCFE were impressed by the amount of innovative and engaging activities on offer. The success Leeds Libraries has seen in collaborating with local partners and utilising local history will be revisited in the future to continue to improve programmes.