A Case Study of Legacy Source Code

The Computer Music System TAU2-TAUmus

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- Developed in Pisa: fits well the SWHAP@Pisa project
- Dedicated (and still existing) hardware
- A pioneeristic work
- Tons of related material (thanks to Leonello Tarabella)

An overview of Grossi's work

- Born in 1917 in Venice
- 1965: professor for the first electronic music course in Italy
- 1967: starts exploring computer music (first Olivetti, then CNUCE)
- 1970: first experiment on musical telematics
- 1975: deployment of TAU2/TAUmus system
- 1985: introduces the concept of Home Art

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- More info: https://www.pietrogrossi.org

Home art nowadays

Tarabella's fonds of TAUmus

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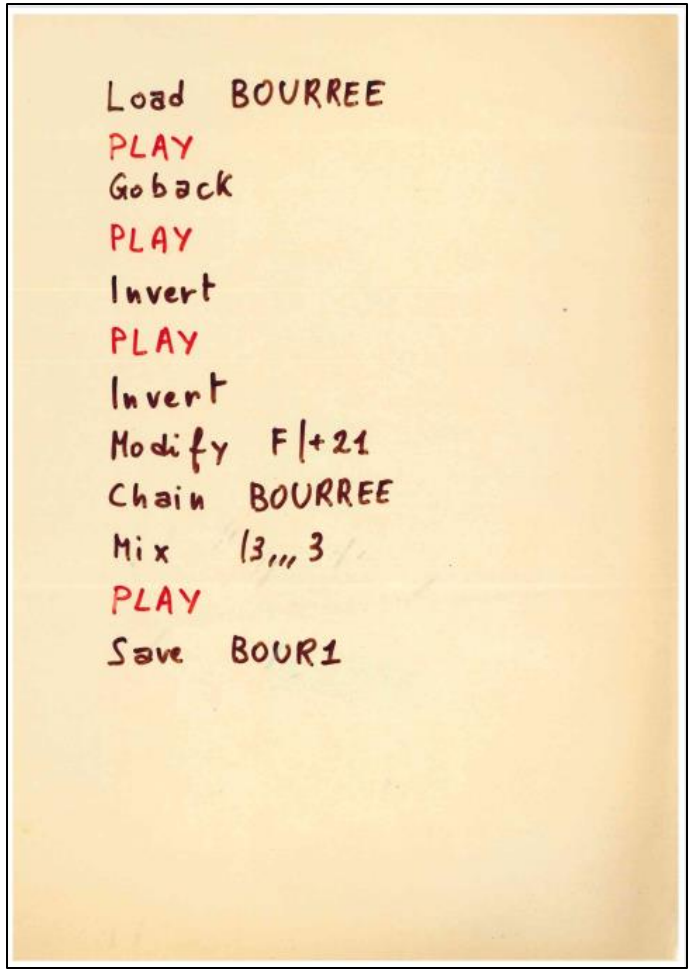

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- Three main categories:
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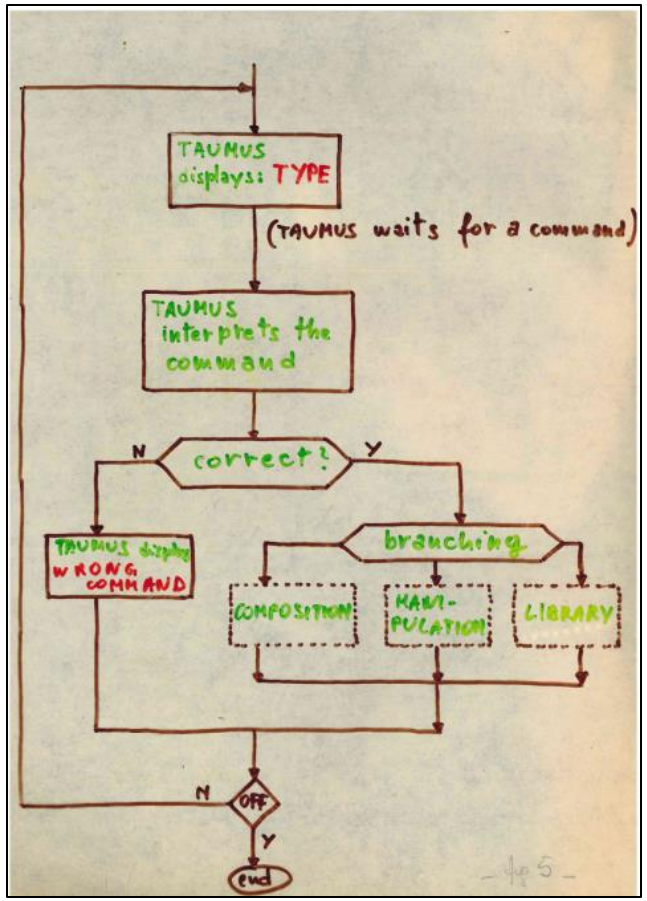
  - Project specifications



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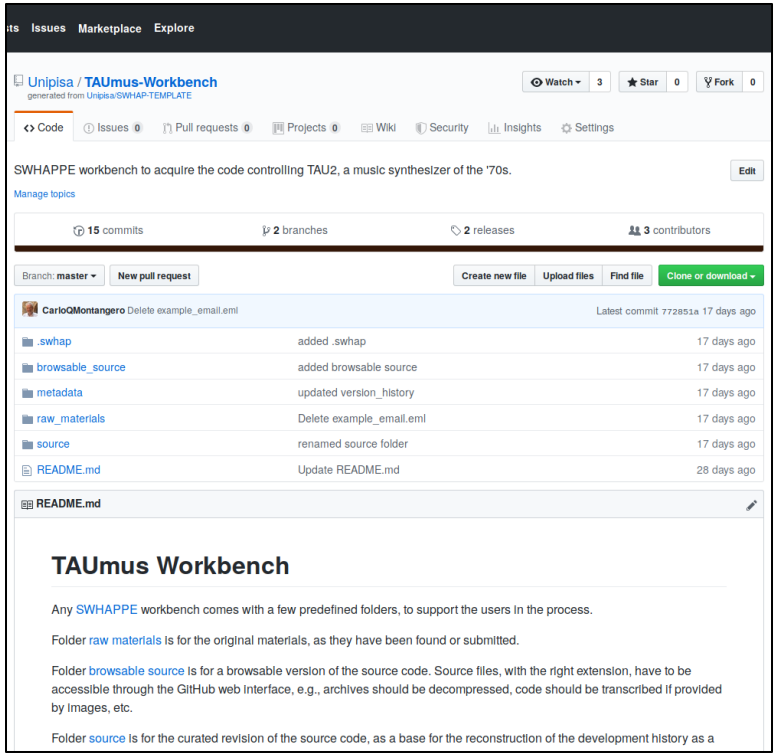
- TAUmus listings:
  - Hand-written, the actual code of music sessions
  - The interpreter was basically a terminal
  - The user could play music using the TAUmus commands

The process, instantiated

- TAUmus Workbench is the (virtual) place where the work actually started



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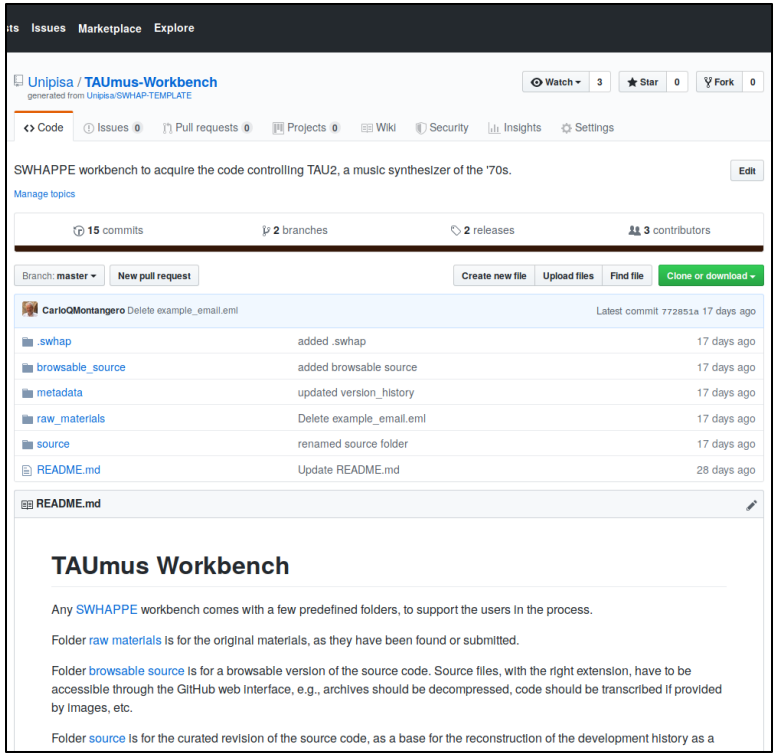

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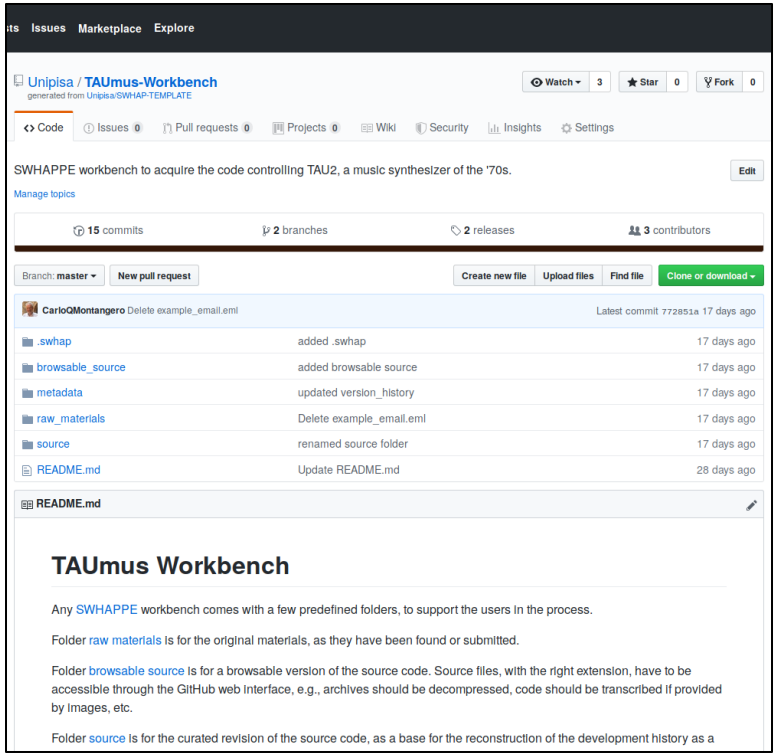
- The directory structure is inherited from the SWHAP template
- From here, we performed the process's steps



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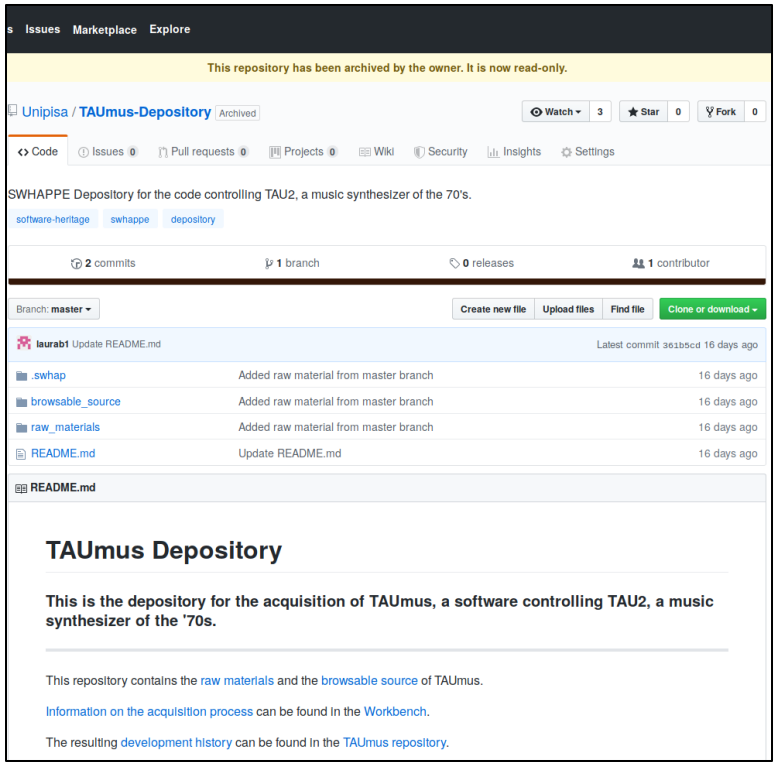
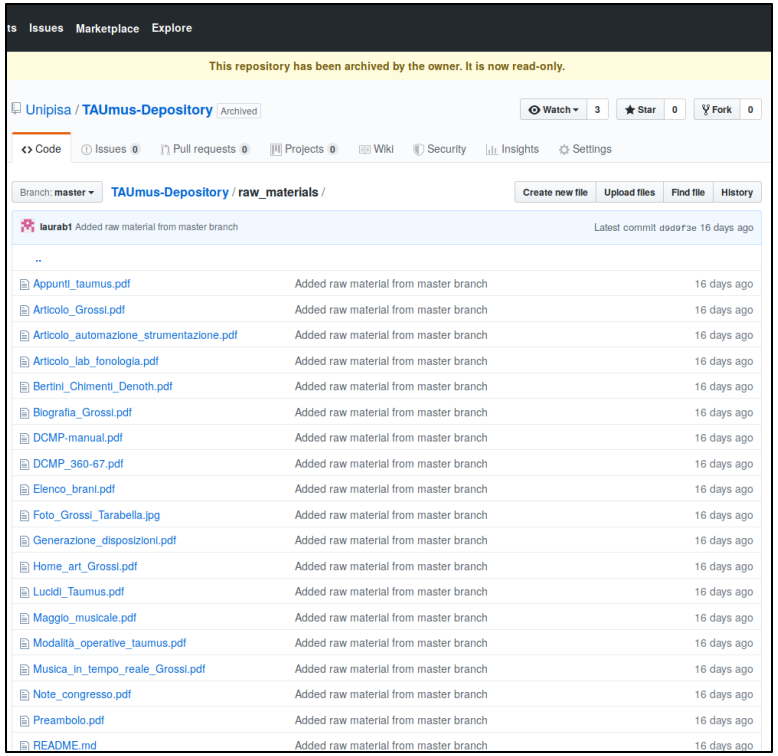


The process, instantiated

- First we created the Depository
  - Here we have raw-material…



The process, instantiated

- First we created the Depository
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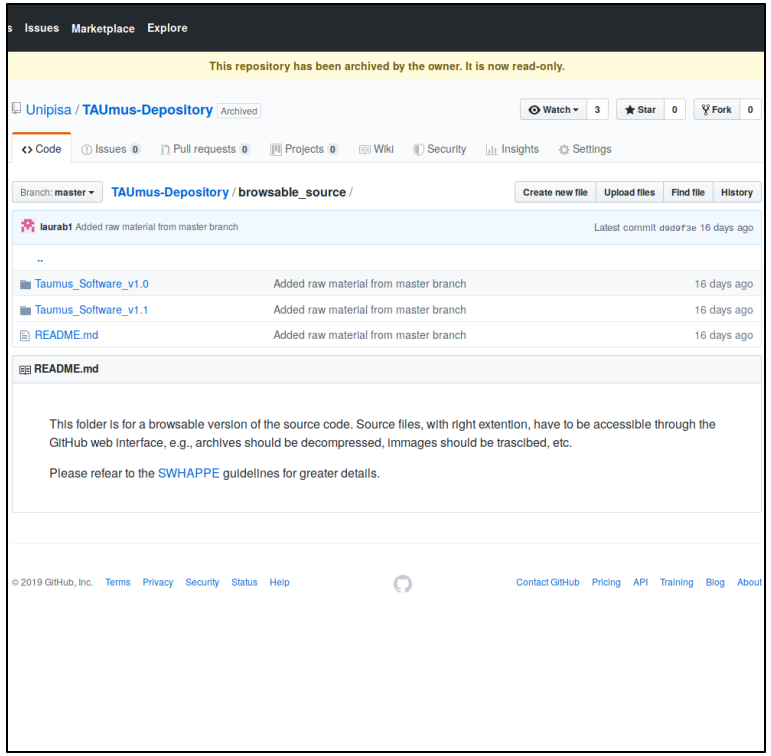
  - …and browsable-source



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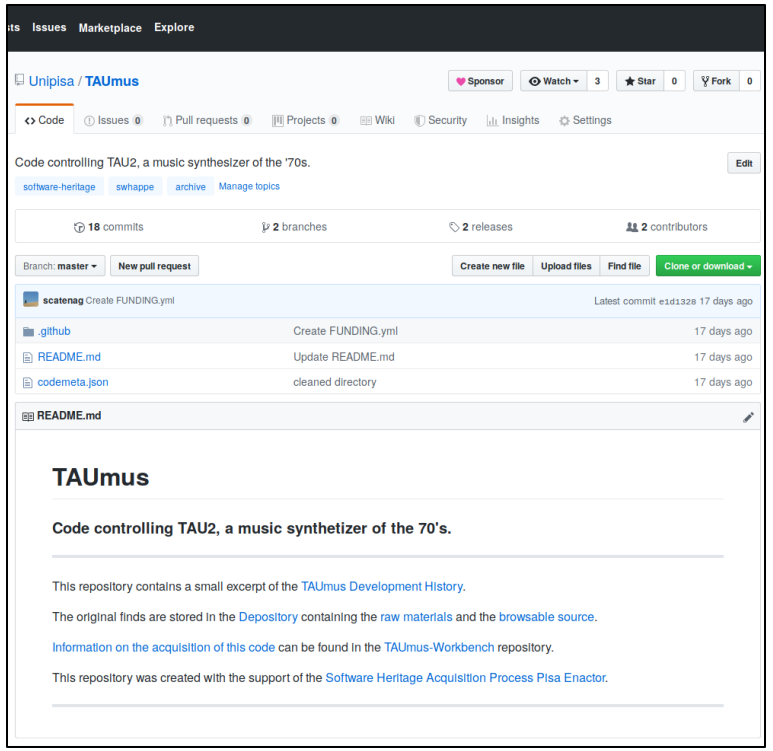

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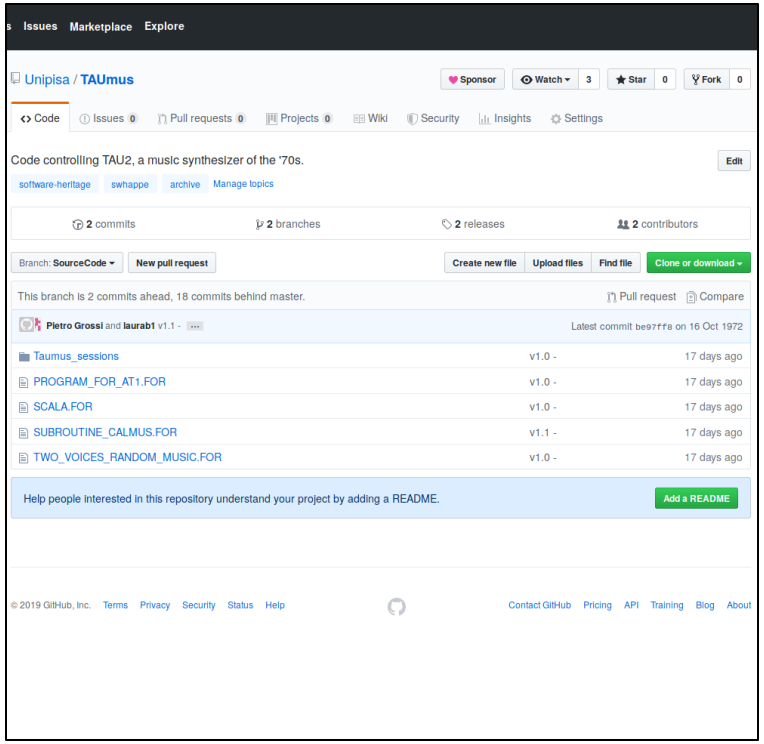

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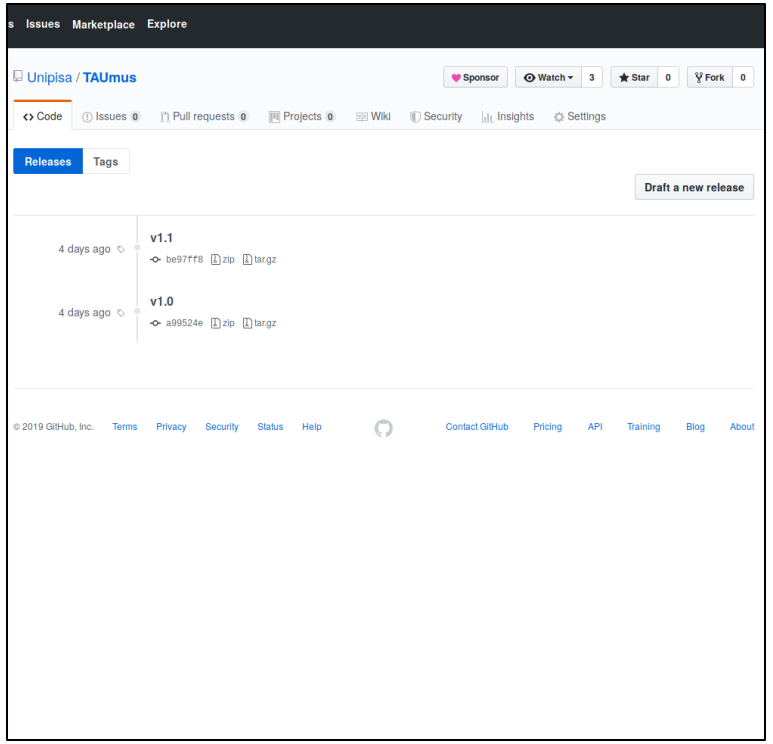
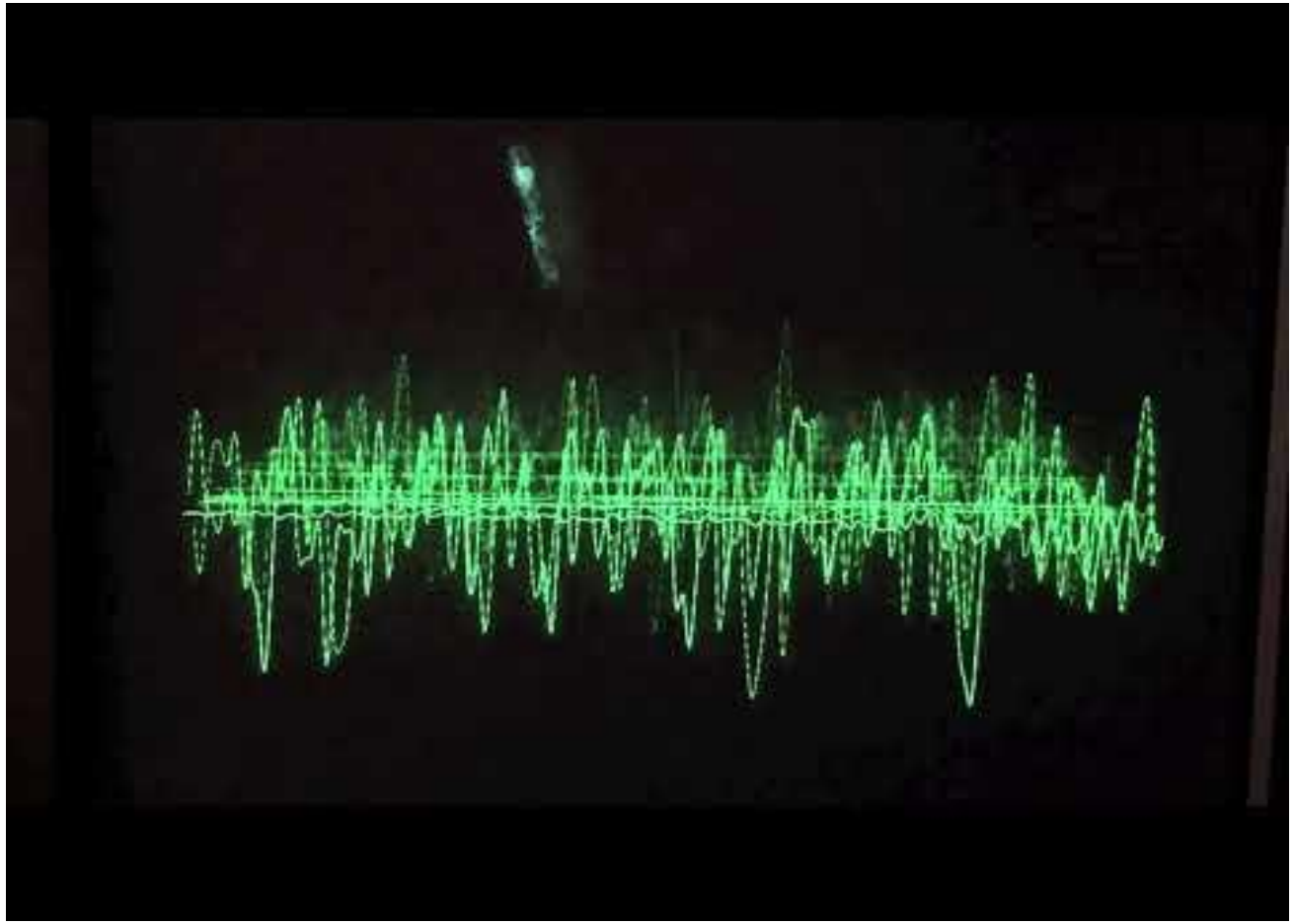
  - The SourceCode branch contains the versioned code
  - The development history can be seen by checking for releases



TAUmus lives back!



Thanks to Massimo Magrini, Signal and Image Laboratory, CNR

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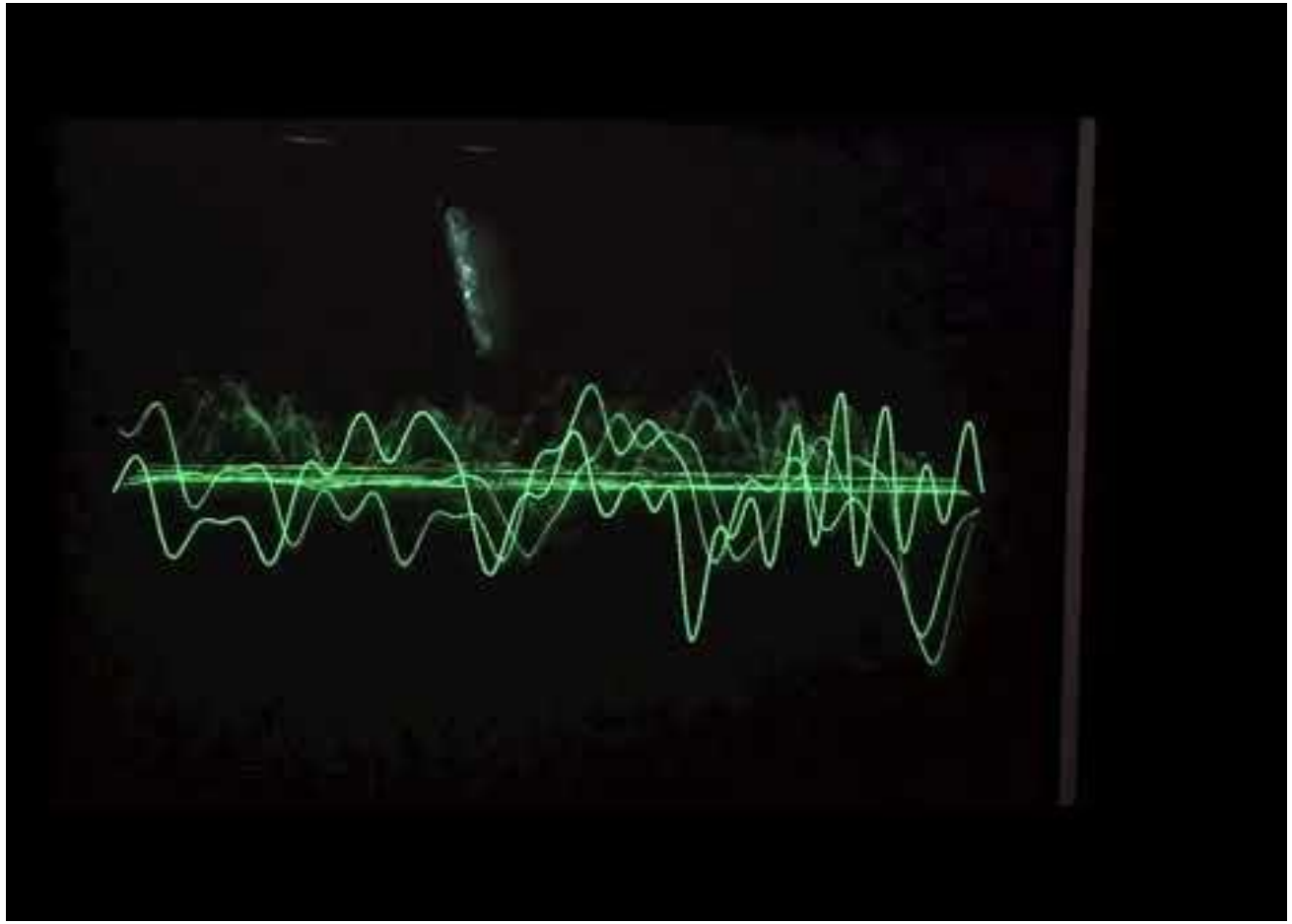

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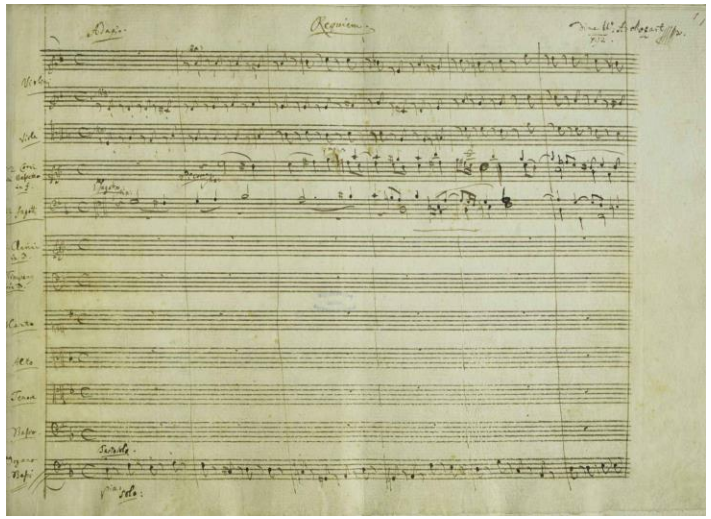
What we achieved

- An important piece of source code has been recovered
- A working sample of the music produced using TAUmus software is now available for everybody
- TAUmus authors and contributors work is recognized and preserved on GitHub and the Software Heritage archive
- Present phase of the process has been partially implemented

What's next

- TAUmus provides an important starting point for further discussions
  - What about "holes"?
  - Does it make sense to deploy a full functioning TAUmus clone on a modern computer?
  - Isn't source code like music, in the end?



Thank you!