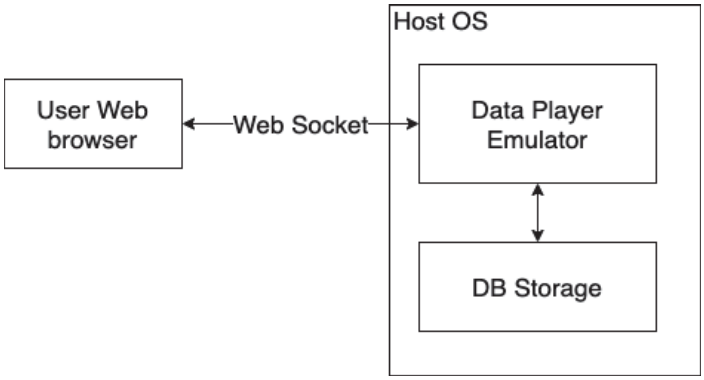


Fig. 8. Historical Data Player Architecture

1) date range selections for historical data.
2) playback speed control. By default, one to one time is used (one second of real time corresponds to receiving data in one second). Other modes are also supported: one to two (one second of real time corresponds to receiving data in two seconds), one to five (historical data in five seconds) and one to ten (historical data in ten seconds)
3) move to any second of historical data range
4) pause playback.
5) save settings for the player and historical data.

The architecture of playing historical data is presented in Fig. 8. Interaction with the server and client parts occurs using web socket protocols. The data player emulator module manages the sending of data to the client and extracts data from the storages.

## VI. Conclusion

This paper considered the generic service development problem in IIoT multiparameter monitoring system, where much data are continuously sensed, processed on the edge, and feed constriction of real-time analytics services. Our particular study subject is the opportunities of human-computer interface that make such services smarter: a) mobile assistance, b) interactive dashboard, c) post-analysis. The above elements can be a part of any IoT monitoring system, making the work of personnel more effective and "digitally closer" to the object of monitoring and analytics. To evaluate the opportunities, we implemented a pilot prototype, which is experimented for the use with real production machinery.

## Acknowledgment

This research is implemented in Petrozavodsk State University (PetrSU) with financial support by the Ministry of Science and Higher Education of Russia within Agreement no. 075-11-2019-088 of 20.12.2019 on the topic "Creating the high-tech production of mobile microprocessor computing modules based on SiP and PoP technology for smart data collection, mining, and interaction with surrounding sources".

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