Objective:

The following task will have two subtasks
1. Is to **create a template based on the designs given**.
2. Is to **create a generator that generates the html template, that which when opened, opens the above template**.

Make sure to read the whole document before starting the task. The framework of choice used does not matter. The implementation needs to be right.

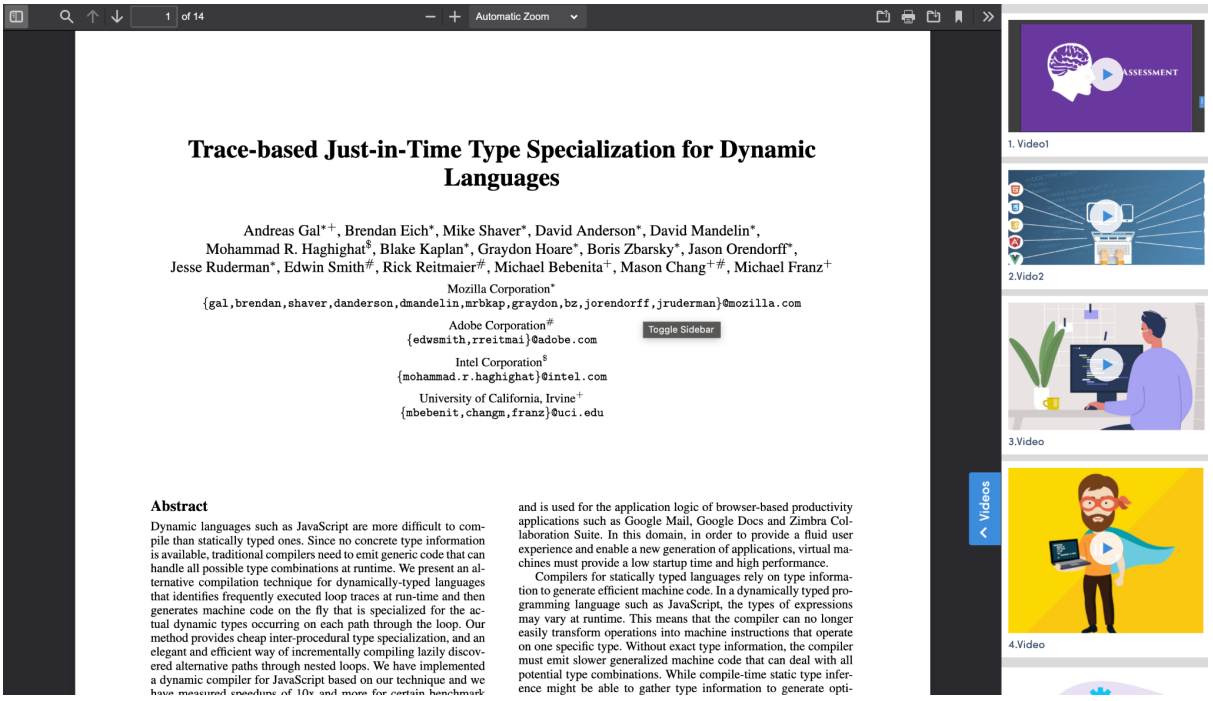
Materials:

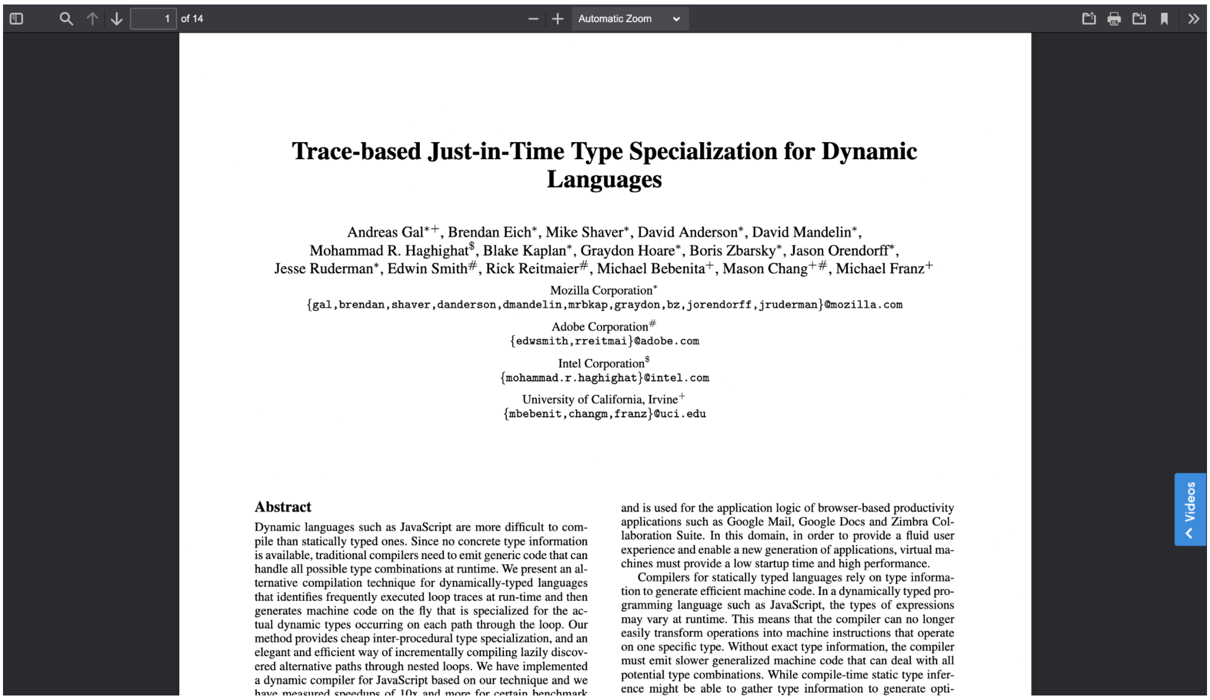
PDF Link: https://mozilla.github.io/pdf.js/web/viewer.html
Video Link: http://techslides.com/demos/sample-videos/small.mp4
Hosted Image Link: https://i.ibb.co/h9xhFxN/Screenshot-2021-10-08-at-3-26-26-PM.png

Details of Task 1:

The template consists of two parts, the left and the right.

- The left part contains an **iframe which includes the PDF**
- The right part is a **collapsible sidebar** that contains a list of videos , that when clicked opens a Modal , which can play a video.





Trace-based Just-in-Time Type Specialization for Dynamic Languages

Andreas Gal*+, Brendan Eich*, Mike Shaver*, David Anderson*, David Mandelin*,
Mohammad R. Haghighat$, Blake Kaplan*, Graydon Hoare*, Boris Zbarsky*, Jason Orendorff*,
Jesse Ruderman*, Edwin Smith#, Rick Reitmaier#, Michael Bebenita+, Mason Chang+#, Michael Franz+

Mozilla Corporation*
{gal,brendan,shaver,danderson,dmandelin,mrbkap,graydon,bz,jorendorff,jruderman}@mozilla.com

Adobe Corporation#
{edwsmith,rreitmai}@adobe.com

Intel Corporation$
{mohammad.r.haghighat}@intel.com

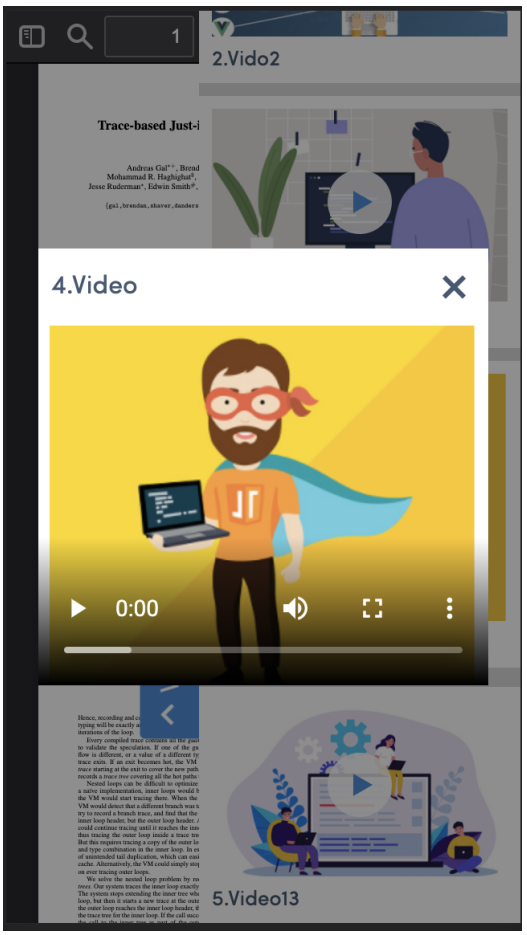
University of California, Irvine+
{mbebenit,changm,franz}@uci.edu

Abstract

Dynamic languages such as JavaScript are more difficult to compile than statically typed ones. Since no concrete type information is available, traditional compilers need to emit generic code that can handle all possible type combinations at runtime. We present an alternative compilation technique for dynamically-typed languages that identifies frequently executed loop traces at run-time and then generates machine code on the fly that is specialized for the actual dynamic types occurring on each path through the loop. Our method provides cheap inter-procedural type specialization, and an elegant and efficient way of incrementally compiling lazily discovered alternative paths through nested loops. We have implemented a dynamic compiler for JavaScript based on our technique and we have measured speedups of 10x and more for certain benchmark

and is used for the application logic of browser-based productivity applications such as Google Mail, Google Docs and Zimbra Collaboration Suite. In this domain, in order to provide a fluid user experience and enable a new generation of applications, virtual machines must provide a low startup time and high performance.

Compilers for statically typed languages rely on type information to generate efficient machine code. In a dynamically typed programming language such as JavaScript, the types of expressions may vary at runtime. This means that the compiler can no longer easily transform operations into machine instructions that operate on one specific type. Without exact type information, the compiler must emit slower generalized machine code that can deal with all potential type combinations. While compile-time static type information to generate opti-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4.Video
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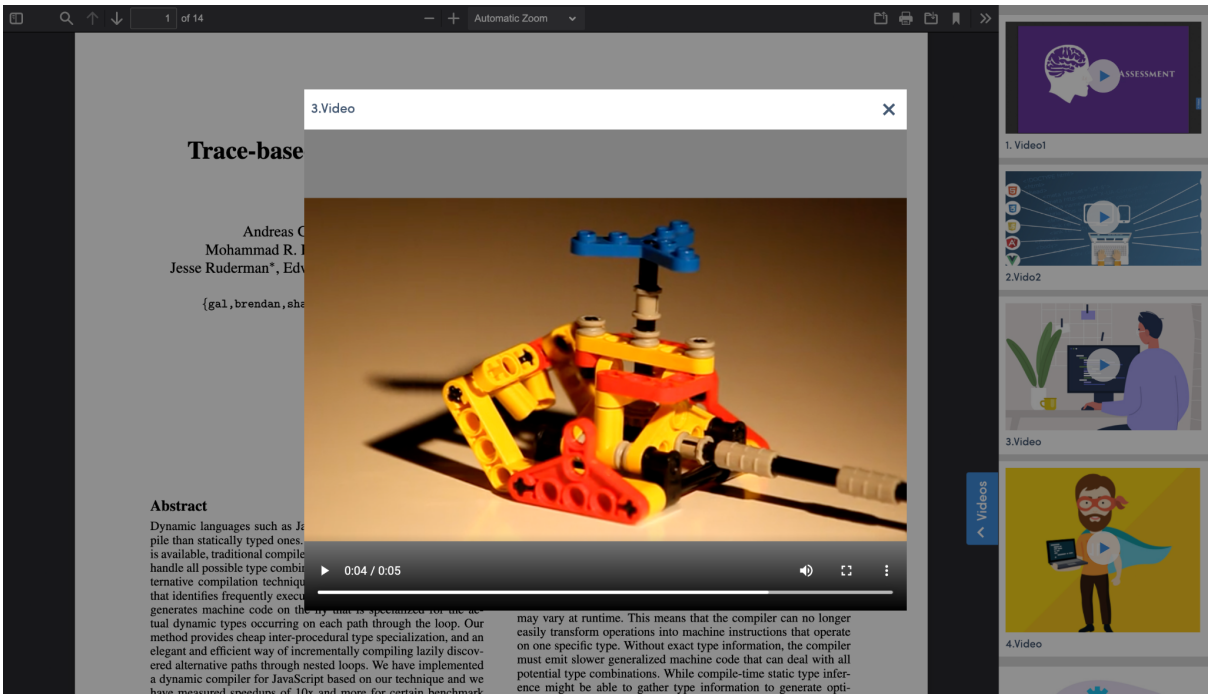
5.Video13


1 of 14
Automatic Zoom
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1. Video1
2.Vido2
3.Video
4.Video
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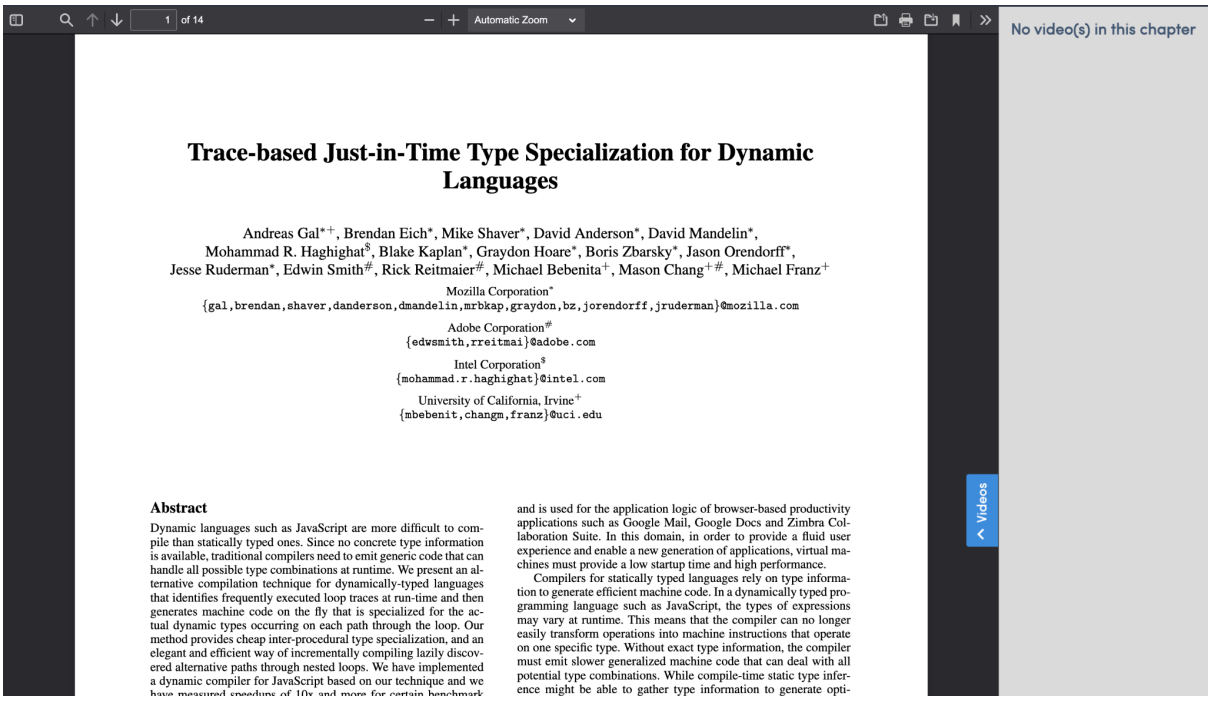
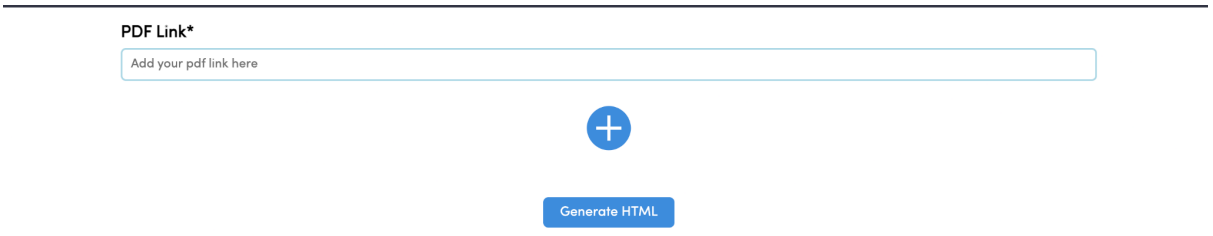


Details of Task 2:

The aim of the following task , is to create a HTML Template Generator that takes in some amount of data i.e required to create the above template.

Use Cases that needs to be implemented:
1. A place to **input the PDF Link.**
2. A provision to **Add Multiple Video data.**
3. A provision to **Remove already added Video.**
4. A provision of a button that on click **downloads the HTML File.**
5. If the HTML file is opened it should **open the above template with the data given.**



PDF Link*

Add your pdf link here

Add video title here

Add video thumbnail URL

Add video URL

Generate HTML

PDF Link*

Add your pdf link here

Please fill in this field.

Add video title here

Add video thumbnail URL

Add video URL

Add video title here

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Generate HTML

Backend Task Details

- You need to make database schema for same
- Also you need to show list of template that is generate from generate HTML
- You need to show below mention data in list in latest order
- Created_at time format should be human diffraction pattern (5 minutes ago, 1hour ago, 2 days ago)
- Using Download Button user can download that template
- Using preview button he can see that template preview

No	Template Id	Created A	Preview	Download
01	100.qrtzfxer	1 Hour ago	LINK	Download