

# Developing Custom SAPUI5 Applications

## Resources

### Recommended Books

- [SAP Gateway and OData](#)
  - General information on OData, as well as SAP's tools for implementing it in Gateway. Lots of example code and very complete explanations of niche (but useful!) features of SAP Gateway.
- [SAPUI5: The Comprehensive Guide](#)
  - The latest book on UI5. Does not require ABAP knowledge to get through this book.
- [JavaScript: The Good Parts](#)
  - There are so many JavaScript libraries, toolkits, and frameworks out there. This book will lay a solid foundation to understanding any of them - written by a major contributor to the ecosystem.
- [Getting Started with SAP HANA Cloud Platform](#)
  - A great book by a great author. Web IDE and other features of HCP are used in this course, and this book will lay groundwork for understanding the whole of HANA Cloud Platform.

### Recommended E-learning

[openSAP](#) is strongly recommended as a supplement to in-classroom learning.

- [Developing Web Apps with SAPUI5](#)
  - A good review of material covered in this course.
- [Developing Mobile Apps with SAP HANA Cloud Platform](#)
  - The natural extension of UI5 is to apply mobile device capabilities, security, and features to UI5 web apps.

### Online Resources

- [SAPUI5 Demo Kit](#)
  - Bar none the most powerful tool in inspecting and understanding UI5.
- [Fiori Design Guidelines](#)
  - Know the controls, know the styles, know the appropriate places to use them.
- [OData Test Service](#)

- Get a usable, testable OData service without programming. Conforms to standards, available on public internet. An excellent way to focus in on the UI5 side of the equation when trying out new things in SAPUI5.

## SAP Gateway

T-codes you should know:

- SEGW
  - Project builder. Everything starts here.
- /IWFND/GW\_CLIENT
  - Testing/validation of services from an internal perspective.
- /IWFND/MAINT\_SERVICE
  - Turn on/turn off services.
- /IWFND/ERROR\_LOG
  - See lots of details on errors that happen in OData. Call stack, replay events.
- /IWFND/CACHE\_CLEANUP
  - Make sure that users are receiving the latest code in their web applications.

## SAPUI5

Browser shortcuts:

- Ctrl+shift+alt+s: Support Tool
  - Activate debug sources. Useful for debugging a production application.
  - Control tree. See which controls are on a view and their properties/bindings. Even set breakpoints in class methods.
- Ctrl+shift+i: Chrome developer console
  - Sources tab for debugger - simply the best debugger around for browsers.
  - Network tab: watch requests happen and repeat them if necessary. Needs to be running to collect stats.
  - Elements: show active HTML of page. Useful for viewing/debugging CSS.
  - Console: live at runtime, do evaluation of JavaScript code. Test theories live.
- [UI5 Inspector](#)
  - In the Chrome developer console, live inspection of UI5 screen elements and properties. Very handy for quick check to see if controls are rendering properly.
- [Postman](#) or [Paw](#) - HTTP request testing suites
  - You will want to test and repeat external access to OData services and replicate small issues as the browser sees them.