

The Blaise 5 Champion Instrument Suite

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1. Abstract

A suite of ten demonstration and survey instruments will be part of the system distribution of Blaise 5. The suite is called the Champion series because it features polished instruments that show off Blaise 5 capabilities. Six of these are called B5 instruments. They have the names *B5Basic*, *B5Modest*, *B5Complex*, *B5Scales*, *B5PanEuropean*, and *B5CodeFrame*. They each show a specific range of features. For example, the *B5Scales* instrument shows how various kinds of scale questions can be handled.

There are four realistic survey instruments including *NCSPerson*, a commuter survey in ten languages. The *Trade* survey is based on a Dutch financial survey. It shows non-linear section navigation. There is the *Census* instrument for data collection on mobile devices that is in English and Spanish. Finally, there is the *Annual Survey of Industry*, a North American survey for use in Canada, the United States, and Mexico.

All of the Champion instruments are multimode. They use a common Resource Database. The Layout Designer of each has eight Layout Sets that work for different modes on different devices. New source code keywords are used such as `MODES`, `ROLES`, `SPECIALANSWERS`, and `SPECIALANSWERSETS`.

The range of devices that are targeted includes smart phones, tablets, and computers; the devices use native apps or Dep, or their browsers. The Champion.blrd Resource Database can be used out-of-the-box for your institute. You can also use it as a good start to make your own Resource Database. The Champion Instruments form a test suite of instruments and questions that institutes can use in their tests.

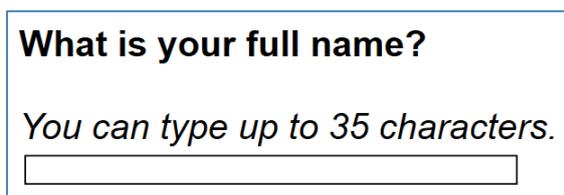
2. Description of Instruments

This section briefly describes selected instrument with a few images from each. All images are from the full-size self-administered browser layout. Pierzchala (2016) describes the uses of the Champion instruments as a test bed for an institute's own standards setting exercise. All Blaise 5 source code, the Resource Database, and other related files will be part of the release.

2.1 B5Basic

The B5Basic instrument demonstrates all the Blaise elementary question types. These include integer, real, string, open, enumerated, set, date, and time question. There are also a few quantity/unit groups. By design, this instrument should easily display correctly on all devices and screens sizes.

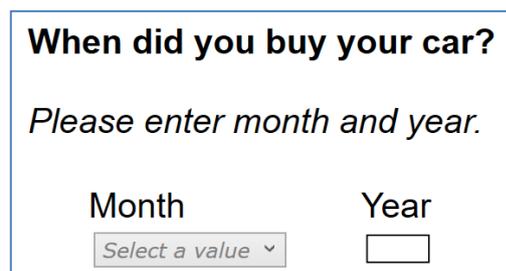
Figure 1. A Basic String Field



What is your full name?

You can type up to 35 characters.

Figure 2. A Quantity/Unit Pair of Fields



When did you buy your car?

Please enter month and year.

Month Year

Figure 3. A Basic Enumerated Field

What is the highest level of education you have attained?

Choose one answer.

- Elementary school
- Some high school
- Graduated high school
- Some college
- Graduated college
- Some graduate school
- Masters or higher degree

2.2 B5Modest

The B5Modest instrument increases the complexity of the questions. For example, Figure 4 shows a lengthier enumerated field that challenges display on smart phones. The question is long, the instruction is long, there are nineteen categories, and some of the choice texts are long. It is also a real survey question. Such a question is called a *stressor* because it stresses the Blaise 5 system in order to improve it.

Figure 4. A More Complex Enumerated Field

We need to assign a standardized educational code to your field of study.

There are 19 categories. Select one that best describes your field of study.

- | | |
|--|--|
| <input type="radio"/> Agricultural Sciences | <input type="radio"/> Library Science |
| <input type="radio"/> Biological or Life Sciences | <input type="radio"/> Mathematics and Statistics |
| <input type="radio"/> Business Management and Administrative Sciences | <input type="radio"/> Physical Sciences |
| <input type="radio"/> Computer and Information Sciences | <input type="radio"/> Philosophy, Religion or Theology |
| <input type="radio"/> Conservation and Natural Resources | <input type="radio"/> Psychology |
| <input type="radio"/> Education | <input type="radio"/> Social Sciences or History |
| <input type="radio"/> Engineering and Engineering-Related Technologies | <input type="radio"/> Social Work |
| <input type="radio"/> Health and Related Sciences | <input type="radio"/> Visual or Performing Arts, or |
| <input type="radio"/> Languages, Linguistics, Literature or Letters | <input type="radio"/> OTHER Field Not Listed |
| <input type="radio"/> Liberal Arts or General Studies | |

Additionally, the *B5Modest* instrument shows more complex question structures such as name and address collections (Figure 5) and other specify groups (Figure 6).

Figure 5. A Job Title and Name Collection

Please enter your job title and name.

Job title

First name *

Middle name

Last name *

Suffix

Figure 6. An Other-Specify Group

? Which kinds of employment have you had?
Choose all that apply.

Self employed

Government (exclude military service)

Military service (exclude civilian military)

Private profit-making company

Non-profit organization

Other (please specify)

2.3 B5Complex

The *B5Complex* instrument features complex groups of questions, usually tables (Figures 7 and 8).

Figure 7. A Job Title and Name Collection

	Name	Gender	Age	Relationship to you
Person 1	<input type="text"/>	<input type="radio"/> Male <input type="radio"/> Female	<input type="text" value="Select a value"/>	
Person 2	<input type="text"/>	<input type="radio"/> Male <input type="radio"/> Female	<input type="text" value="Select a value"/>	<input type="text" value="Select a value"/>
Person 3	<input type="text"/>	<input type="radio"/> Male <input type="radio"/> Female	<input type="text" value="Select a value"/>	<input type="text" value="Select a value"/>
Person 4	<input type="text"/>	<input type="radio"/> Male <input type="radio"/> Female	<input type="text" value="Select a value"/>	<input type="text" value="Select a value"/>

Figure 8. A Battery of Yes/No Questions

Thinking back to the time you took community college courses, for which of the following reasons did you take those courses from a community college? Was it . . .

	Earn credits	
	Yes	No
To earn college credits while still attending high school?	<input type="radio"/>	<input type="radio"/>
To complete an associates degree?	<input type="radio"/>	<input type="radio"/>
To prepare for college / increase chance of acceptance to a 4-year college or university?	<input type="radio"/>	<input type="radio"/>
To earn credits for a bachelor's degree?	<input type="radio"/>	<input type="radio"/>
For financial reasons, for example because of the cost of a 4-year school?	<input type="radio"/>	<input type="radio"/>
To gain further skills or knowledge in your academic or occupational field?	<input type="radio"/>	<input type="radio"/>
To facilitate a change in your academic or occupational field?	<input type="radio"/>	<input type="radio"/>
To increase opportunities for promotion, advancement or higher salary?	<input type="radio"/>	<input type="radio"/>
For leisure or personal interest?	<input type="radio"/>	<input type="radio"/>
For some other reason?	<input type="radio"/>	<input type="radio"/>

2.4 B5Scales

The B5Scales illustrates how different scales are handled (Figures 9 and 10).

Figure 9. Phrase Completion Scales

I have faith that the local sports club will win the championship this year.

No faith at all 0 1 2 3 4 5 6 7 8 9 Complete faith 10

I have faith that the local sports club will win the championship in the next five years.

Complete faith 10 9 8 7 6 5 4 3 2 1 No faith at all 0

Figure 10. Some Likelihood Questions

With respect to your research career, how likely is it that you will . . .

	Likelihood			
work at this institution most of your career?	<input type="radio"/> Not likely	<input type="radio"/> Somewhat likely	<input type="radio"/> Very likely	<input type="radio"/> Not sure
conduct research as your main job responsibility?	<input type="radio"/> Not likely	<input type="radio"/> Somewhat likely	<input type="radio"/> Very likely	<input type="radio"/> Not sure
remain in your field of research specialty?	<input type="radio"/> Not likely	<input type="radio"/> Somewhat likely	<input type="radio"/> Very likely	<input type="radio"/> Not sure
work in private industry?	<input type="radio"/> Not likely	<input type="radio"/> Somewhat likely	<input type="radio"/> Very likely	<input type="radio"/> Not sure
work in an academic institution?	<input type="radio"/> Not likely	<input type="radio"/> Somewhat likely	<input type="radio"/> Very likely	<input type="radio"/> Not sure

2.5 NCSPerson

The NCSPerson instrument is a commuter survey. It is programmed in English, Dutch, French, Spanish, Greek, Hebrew, Arabic, Hindi, Chinese, and Japanese. It is meant to be used in fifteen different countries. Figures 11 through 14 show the same set of questions in four languages.

Figure 11. Questions in English

Give a short description of your job with MMP Survey Services, LLC at this location.

What is the distance from home to work? **Unit of measurement?**
You can enter a number with up to 1 decimal place.

Miles
 Kilometers

How do you travel to this work place?
Give up to 4 answers.

Bus Car or van pool
 Tram or trolley Motorcycle
 Subway/metro, elevated light rail Bicycle
 Train, not light rail Walk
 Car by yourself

Figure 12. Questions in Chinese

请简单描述一下您在 MMP Survey Services, LLC 的这个工作地点所从事的工作。

从您家到上班地点有多远？
您可以输入带有一位小数的数字。

计量单位
 英里
 公里

您是如何到上班地点的？
可以提供最多4个答复。

公交车 拼车
 电车，有轨车 摩托车
 地下铁，高架轻轨铁路 自行车，脚踏车
 火车 步行
 自家车

Figure 13. Questions in Hindi

आपके काम के बारे में एक संक्षिप्त विवरण MMP Survey Services, LLC के साथ इस स्थान के लिए दें।

आपके घर से आपके कार्यस्थल का दूरी क्या है?
आप संख्या के साथ 1 दशमलव स्थान तक दर्ज कर सकते हैं।

माप की इकाई
 मील
 किलोमीटर

आप इस काम के स्थान के लिए यात्रा कैसे करते हैं?
चार जवाब तक लिखें।

बस कार या वैन पूल
 ट्राम या ट्राली मोटर साइकिल
 सबवे / मेट्रो या ऊंचा हल्की रेल साइकिल
 रेलगाड़ी पैदल
 अपने आप से कार

Figure 14. Questions in Hebrew – a Right-to-Left Language

לתת תיאור קצר של העבודה שלך עם מעביד במיקום זה

יחידה של מדידות
 מייל
 קילומטרים

מה המרחק שלך מהבית לעבודה?
אתה יכול להזין מספר עם מקום עד אחד עשרוני

איך אתה נוסע למקום העבודה הזה

נסיעה משותפת אוטובוס
 אופנוע חשמלית או עגלה
 אופניים רכבת תחתית / מטרו או רכבת קלה עילית
 ללכת רכבת
 מכונית בעצמך

2.6 Census

This instrument is modelled on a census-type questionnaire. Some question structures are very complex. Figure 15 shows a set (code-all-that-apply) question structure where every choice has a specify field attached.

Figure 15. An Elaborated Set-Specify Question Structure

What is Mark Pier's race or origin? Select one or more boxes, AND enter the specific races or origins.	
<input type="checkbox"/>	White - Enter origin(s), for example, German, Irish, English, Italian, Lebanese, Egyptian, and so on.
	<input type="text"/>
<input type="checkbox"/>	Hispanic, Latino or Spanish origin - Enter origin(s), for example, Mexican or Mexican-American, Puerto Rican, Cuban, Dominican, Salvadoran, Columbian, and so on.
	<input type="text"/>
<input type="checkbox"/>	Black or African Am. - Enter origin(s), for example, African American, Jamaican, Haitian, Nigerian, Ethiopian, Somalian, and so on.
	<input type="text"/>
<input type="checkbox"/>	Asian - Enter origin(s), for example, Chinese, Filipino, Asian Indian, Vietnamese, Korean, Japanese, and so on.
	<input type="text"/>
<input type="checkbox"/>	American Indian or Alaska Native - Enter name of enrolled or principal tribe, for example, Navaho Nation, Blackfeet Tribe, Muscogee (Creek) Nation, Mayan, Doyon, Native Village of Barrow Inuplat Traditional Government, and so on.
	<input type="text"/>
<input type="checkbox"/>	Native Hawaiian or Other Pacific Islander - Enter origin(s), for example, Native Hawaiian, Somonoam, Guanamian or Chomorro, Tongan, Fijan, Marshallese, and so on.
	<input type="text"/>
<input type="checkbox"/>	Some other race or origin- Enter race(s) or origin(s).
	<input type="text"/>

3. References

Pierzchala, M. (2016). Blaise 5 – Is Worth the Wait. Paper presented at the 2016 International Blaise Users Conference, The Hague, The Netherlands, 2016.